

# The Mining Journal.

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper and for Transmission Abroad.]

No. 2362.—VOL. L.

LONDON, SATURDAY, NOVEMBER 27, 1880.

[WITH SUPPLEMENT.] {PRICE ..... SIXPENCE  
PER ANNUM, BY POST £1 4s.

**MR. JAMES H. CROFTS, STOCK AND SHARE BROKER,  
AND MINING SHARE DEALER,  
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.  
ESTABLISHED 1842.**

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Bonds, (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.  
Business negotiated in Stocks and Shares not having a general market value.  
Every Friday a general and reliable List issued (a copy of which will be forwarded regularly on application), containing closing prices of the week.

**MINES INSPECTED.  
BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUSTELL.**

**SPECIAL DEALINGS in the following, or part:—**  
100 Herodsfoot, £2 7s. 6d.  
100 Hingston Down, £1 13s. 9d.  
75 Javali.  
35 Leadhills, £2 2s.  
30 Marke Valley, £1 18s. 9d.  
50 North D'Erresby, 25s.  
30 Nouv. Monde, 22s. 6d.  
75 N. Penarth, £1 1s.  
call paid.  
50 Pandora, 17s.  
50 Pen-yr-Orsedd, £1 1s.  
50 Port Phillip, 10s. 6d.  
80 Prince of Wales, 16s. 6d.  
100 Parys Copper, £1 2s. 6d.  
100 Pestarena, 8s.  
25 Ruby, £7 2s. 6d.  
20 Richmond, £15s.  
15 Roman Grav., £9 12s. 6d.  
40 S. Indian Gold, £2 2s.  
20 So. Condurow, £1 1s.  
25 South Darren, £2 3s. 9d.  
50 So. E. Wynad, £1 18s. 9d.  
100 S. Penarth, 10s.  
25 Tankerville Gt. Con., 15s. 15s. (20s. paid).  
30 Trevecon Con., 22s. 6d.  
West Godolphin, £2 2s.  
50 West Phoenix, £2.  
25 Wheal Crebor, £4 2s.

**SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.  
SPECIAL BUSINESS in North D'Erresby Mountain, West Godolphin, and Wheal Crebor at close prices.**

**RAILWAYS—SPECIAL BUSINESS.  
FOREIGN BONDS—SPECIAL BUSINESS.  
AMERICAN STOCKS AND SHARES—SPECIAL BUSINESS.  
Fortnightly accounts opened on receipt of the usual cover in these and all Stock Exchange Securities.**

**JAMES H. CROFTS, 1, FINCH LANE, LONDON.  
ESTABLISHED 1842.**

**MR. W. H. BUMPUS, STOCK AND SHARE BROKER,  
AND MINING SHARE DEALER  
44, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1867.**

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description.  
RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS.  
ANNUITIES, TELEGRAPHS, and all the LEADING INVESTMENTS.  
Accounts opened for the Fortnightly Settlement  
A List of Investments free on application.

**MR. BUMPUS has SPECIAL BUSINESS in the undermentioned:—**  
100 Almada, 10s. 6d.  
100 Blue Tent, 35s. 9d.  
100 Copago, £12 2s.  
100 Colorado, £2 2s.  
100 Consolidated, 5s. 6d.  
100 Cape Copper, £4 1s.  
100 Dolcoath, £5 7s.  
100 Don Pedro, 13s. 3d.  
100 Derwent, £2 2s.  
100 Derris-Moyar, £2 2s.  
100 Emma, £4 4s.  
100 East Pool, £2 2s.  
100 East Caradon, £2 2s.  
100 E. Roman Grav., 15s.  
100 Eberhardt, £2 2s.  
100 Flagstaff, 38s. 9d.  
100 Frontino, £4 2s.  
100 Great Laxey, £19 2s.  
20 Great Holway, £4 2s.  
100 Glenroy, 13s. 6d.  
25 Gorse and Merilyn.  
50 Herodsfoot, 19s.  
50 Hingston, £1 1s.  
150 Indian Glenrock, 31s.  
60 La Plata, 35s.  
30 Leadhills.  
25 Mellor ear, £5 2s.  
10 Minera, £10.  
25 New Pevor.  
70 Nouveau Monde, 22s. 6d.  
20 New Quebrada, £6 2s.  
50 No. Herodsfoot, 11s. 6d.  
30 North Busy.  
100 Parys Copper, 22s.  
100 Pestarena, 8s. 6d.  
50 ditto (12 1/2 per cent. preference), 22s. 6d.  
75 Pen-yr-Orsedd, 25s.  
20 Panulicillo.  
50 Port Nigel, 41s.  
100 Port Phillip, 10s. 6d.  
15 Richmond, £15 2s.  
25 Ruby, £7 2s. 6d.  
10 Roman Gravels, £9 2s.  
5 Rio Tinto, £19 2s.  
5 South Frances.  
100 South Indian, £2 2s.  
50 Tankerville.  
10 Tincroft.  
50 West Godolphin, £2 2s.  
35 Wh. Sisters, £2.  
50 West Phoenix, £2.  
15 Wh. Grenville, £10 2s.  
20 Wheal Pevor, £29 2s.  
100 Wh. Jewell, 14s.  
25 Wh. Crebor, £4 13s. 9d.

**SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.**

**MR. BUMPUS devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.**

**Shares in SOUND TIN MINES should now be bought for an important rise in market value and good dividends. The following are particularly recommended:—**  
WHEAL GRENVILLE. WEST PEVOR.  
WHEAL PEEVOR. NEW PEVOR.

**WEST GODOLPHIN.**—This valuable property is about to be vigorously re-worked under the same management as WHEAL GRENVILLE. Ample capital has already been subscribed, and profitable results may be confidently expected in the coming year. In the meantime the shares are likely to advance considerably in value, and should, therefore, be secured without delay. Full particulars on application.

**WILLIAM HENRY BUMPUS, SWORN BROKER.  
OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1867.**

**FREDERICK R. KIRK, 5, BIRCHIN LANE,  
LONDON, E.C.**  
FORTNIGHTLY ACCOUNTS opened, on receipt of the usual "cover," in Railways Home and Foreign, Mining Shares, Foreign Bonds, and certain Miscellaneous Securities.  
"THE WEEK."—A SEPARATE EDITION from that which appears in the Mining Journal is published every Wednesday evening, containing "Notes and Hints on the Stock Markets," with Closing Prices. May be had on application.  
BANKERS: LONDON AND WESTMINSTER, Lothbury.

**MR. E. J. BARTLETT, BRITISH AND FOREIGN STOCK  
AND SHARE DEALER, No. 30, GREAT ST. HELEN'S, LONDON, E.C.**

**LAST LOVELL.**—The rise in price has commenced. Further improvement expected. Special business at close prices.

**MR. GEORGE BUDGE, STOCK AND SHARE DEALER  
9, GRACECHURCH STREET, LONDON, E.C. (Established 28 years).  
ALL BUSINESS TRANSACTED FREE OF ANY CHARGE FOR  
COMMISSION.**

**Notice to Investors and Speculators.**  
Mr. BUDGE has DEALINGS in—  
100 Almada, 10s. 6d.  
100 Blue Hills.  
100 Bedford United.  
100 Bodidris.  
100 Consolidated.  
100 Caron.  
100 Chontales.  
100 Don Pedro.  
100 Devon & Tiverton Bry.  
100 East Roman Gravels.  
100 East Caradon.  
100 East Chiverton.  
100 Emma.  
100 Frogoch.  
100 Flagstaff.  
100 Glenroy.  
25 Gawton.  
20 Grogwinlon.  
50 Herodsfoot.  
100 Hingston Down.  
50 Javali.  
50 Nouveau Monde.  
70 Landegia.  
100 Lady Ashburton.  
20 Mount Carbis.  
50 New Whe Valley.  
60 New Kitty.  
50 Pandora.  
75 Prince of Wales.  
100 Pestarena.  
100 Parys Copper.  
50 South Tolkarn.  
75 South Crebor.  
100 South Devon.  
10 Tincroft.  
30 West Chiverton.  
35 West Kitty.  
15 Wheal Kitty.  
100 Wheal Jewell.  
50 West Caradon.  
Wynad Perseverance.  
50 Ystwith.

**SPECIAL BUSINESS in Frogoch, Van, Grogwinlon, Roman Gravels, New Whe Valley, Ystwith, Pevor, Wheal Kitty, New Kitty, Gawton, and Bedford United.**

### INDIAN GOLD MINES.

**THE MYSORE REEF'S GOLD MINING COMPANY  
(LIMITED),  
MYSORE TERRITORY, MADRAS PRESIDENCY.  
NOTICE.**

The PROSPECTUS, issued TO-DAY, is published in THIS WEEK'S MINING JOURNAL at PAGE 3.

PROSPECTUSES and FORMS OF APPLICATION can be had of  
Messrs. PETER WATSON AND COMPANY,  
BRITISH AND FOREIGN MINING OFFICES,  
18, AUSTIN FRIARS, LONDON, E.C.,  
On PERSONAL APPLICATION, or will be forwarded immediately BY POST to INTENDING APPLICANTS for SHARES.

The CLOSING OF THE LIST WILL SHORTLY TAKE PLACE. EARLY APPLICATIONS should, therefore, be made. THOSE APPLICANTS who may send their FORMS OF APPLICATIONS FOR SHARES, accompanied with a remittance for the same through Messrs. PETER WATSON AND COMPANY, who will do their BEST TO SECURE an ALLOTMENT OF SHARES.

Cheques should be crossed—The Alliance Bank (Limited).

**MESSRS. PETER WATSON AND CO.'S  
BRITISH AND FOREIGN MONTHLY MINING NEWS  
—STOCK AND SHARE INVESTMENT NOTES—MINES,  
MINERALS, AND METAL MARKETS—SHARE LIST,  
No. 825, VOL. XV., for NOVEMBER month, will be ready early next week, and sent to customers on application.**

Annual Subscription..... 5s. 1 Single Copy..... 6d.

**MESSRS. PETER WATSON AND CO.,  
18, AUSTIN FRIARS, E.C.**

### INDIAN GOLD MINING.

IN THIS MONTH'S (for NOVEMBER) ISSUE, which will be published THIS WEEK, some INFORMATION WILL BE GIVEN respecting INDIAN GOLD MINES.

**COPPER, TIN, AND LEAD MINES.**  
Some IMPORTANT INFORMATION WILL BE GIVEN IN NOVEMBER MONTH'S ISSUE, No. 825, published THIS WEEK.

### BRITISH AND FOREIGN MINING OFFICES.

**MESSRS. PETER WATSON AND CO.,  
18, AUSTIN FRIARS,  
OLD BROAD STREET, LONDON, E.C.  
BANKERS: THE ALLIANCE BANK (Limited).**

**MR. ALFRED E. COOKE  
DEALER IN BRITISH AND FOREIGN STOCKS AND SHARES  
OF EVERY DESCRIPTION.  
76, OLD BROAD STREET, LONDON.  
ESTABLISHED 1853.**

**SPECIAL BUSINESS.**  
BODIDRIS.  
TANKERVILLE GREAT CONSOLS.  
NORTH D'ERRESBY MOUNTAIN.  
SOUTH CREBOR.  
PARYS.  
INDIAN MINES, &c.

**THE INVESTORS' GAZETTE.  
Every FRIDAY EVENING, Three stamps.**

THE "SAFEST GUIDE."  
PROFITABLE ADVICE—LATEST NEWS.

**NORTH D'ERRESBY MOUNTAIN.**  
These shares are now 25s., and should be BOUGHT AT ONCE. They were recommended at 20s., and will probably soon be DOUBLE THE PRICE.

**DEVON FRIENDSHIP.**  
This is the BEST MINE that has been offered to the public for a long time. Shares should be AT ONCE applied for to Mr. COOKE.

**ALFRED E. COOKE,  
76, OLD BROAD STREET, LONDON.  
(14 years at the above offices, adjoining the Stock Exchange, with which they are in DIRECT TELEGRAPHIC COMMUNICATION.)**

**STOCKS AND SHARES,  
FOREIGN BONDS, TELEGRAPHS, TRAMWAYS, RAILWAYS, AND  
OTHER LEADING SECURITIES.**

**MR. JAMES STOCKER, STOCKBROKER,  
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1848.**

Business transacted in all Stock Exchange Securities. British and Foreign Mines for cash or fortnightly accounts opened on receipt of the usual cover. BANKERS: LONDON AND WESTMINSTER.

**MR. W. B. COBB, STOCK AND SHARE DEALER,  
23, BISHOPSGATE STREET, LONDON, E.C.**  
Business transacted in every description of Stocks and Shares.  
For a rise of 200 per cent. I strongly advise immediate purchase of shares in West Lisburne and Bwlch United Mines.  
Full particulars, with view of the Bwlch United Mines, and plan of West Lisburne, post free on application.  
Also, shares in a dividend-paying Gold Company.

**MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,  
29, BISHOPSGATE STREET, LONDON, E.C.**

Can sell the following SHARES at prices annexed:—  
15 Birdseye, 37s. 6d.  
25 Brazilian Gold, 24s.  
20 Bwlch United.  
30 Carnarvon, 15s.  
20 Colorado, £2 11s. 3d.  
50 Cambrian, 19s.  
50 Chontales, 6s. 3d.  
30 Devon Gt. Uni., 2s.  
50 Don Pedro, 15s.  
20 Devala Moyer, £2 2s.  
10 Devon Consols, £12 2s.  
20 Eberhardt, 2s.  
50 Exchequer, 10s. 6d.  
20 East Caradon, 2s.  
25 Emma, £4 3s. 9d.  
50 English-Austria, 18s. 3d.  
40 Flagstaff, £1 7s.  
20 Frontino, £4 8s. 9d.  
30 Glenrock Gold, £11 3s.  
25 Great Holway.  
20 Herodsfoot, 20s.  
25 Hingston, £1 6s. 3d.  
75 Kilbreth, 5s. 6d.  
20 Leadhills, 2s.  
20 Marke Valley, £2.  
75 New Quebrada, £6 2s.  
Nouveau Monde, 22s. 6d.  
50 Parys Copper, £22s. 6d.  
20 Panulicillo, £8 8s. 9d.  
40 Prince of Wales, 18s.  
30 Port Phillip, 10s.  
100 Pestarena, 8s.  
75 Rosa Grande, 4s. 9d.  
20 Ruby Silver, £7 2s.  
10 Roman Gravels, £9 2s.  
20 Richmond, 15s.  
50 So. E. Wynad, £1 17s.  
55 South Crebor, 30s.  
25 S. Indian Gold, £2 2s.  
50 United Van and Glyn Lead, 12s.  
40 West Assheton, 22s. 6d.  
30 West Devon, £1 5s.  
40 West Lisburne.  
20 Wheal Jane, 16s. 6d.  
20 Wheal Crebor, £4 13s. 9d.

Strongly recommended for a rise of from 100 to 200 per cent., Bwlch United and West Lisburne. Full particulars of these properties, with plan of West Lisburne and view of the Bwlch Mine and its dressing-floors, now ready, and may be had on application.

### THE "DIFFERENTIAL" PUMPING ENGINE (DAVEY'S PATENT), FOR

DRAINING MINES, WATER SUPPLY OF TOWNS, IRRIGATION,  
SUPPLYING DOCKS, PUMPING SEWAGE, and GENERAL  
PUMPING PURPOSES.

**HATHORN, DAVEY, AND CO.,  
LEEDS.**

HATHORN, DAVEY, and Co. have Patterns of "Differential" Engines of all sizes, from 5 to 500-horse power, and have facilities for supplying very powerful Engines and Pumps at a short notice.

See Illustrated Advertisement every alternate week.

**MR. CHARLES THOMAS,  
MINING AGENT, STOCK AND SHARE DEALER,  
3, GREAT ST. HELEN'S, LONDON, E.C.**

**MR. ALFRED THOMAS,  
MINING AGENT, AND STOCK AND SHARE DEALER,  
10, COLEMAN STREET, LONDON, E.C.**

**SOUTH WHEAL CREBOR.**—Mr. ALFRED THOMAS has business both as buyer and seller in these shares.

Just published.  
"What to Select, and What to Avoid," by ALFRED THOMAS, 10, Coleman street, London, E.C. Will be forwarded on receipt of 12 stamps.

**MR. EDWARD ASHMEAD, 2, DRAPER'S GARDENS,  
LONDON, E.C.  
MINING SECRETARY, AUDITOR, AND ACCOUNTANT.**

**BRITISH AND FOREIGN MINES, RAILWAYS,  
TELEGRAPHS, INSURANCES, and EVERY DESCRIPTION OF  
SECURITY DEALT IN, at net prices, cash or for the account. Mines  
inspected in any part of the United Kingdom for a small charge. No charge  
for recommendations to ordinary customers, but to those who have not dealt  
with Mr. R., a charge of One Guinea is made for the Select List of Mines  
good for Investment or Speculation. Mr. REYNOLDS'S opinions are unbiased  
by proprietorship or otherwise, and his facts are gathered at considerable  
trouble and expense.**

Mr. REYNOLDS is also a buyer and seller of Shares in the leading Mines  
such as Carn Brea, Cook's Kitchen, East Pool, West Basset, South Frances,  
West Kitty, North Busy, Wheal Pevor, West Pevor, New Kitty, &c.

Apply to—**JOHN B. REYNOLDS, STOCK AND SHARE DEALER,  
37, WALBROOK, LONDON, E.C.  
ESTABLISHED 22 YEARS.**

**BANKERS: LONDON JOINT STOCK BANK, Princes-street.**

See Mr. REYNOLDS'S remarks on page 1372.

**MR. FREDERICK WILSON,  
30, FINSBURY CIRCUIS, E.C.  
DEALER IN STOCKS AND SHARES.**

Mr. WILSON begs to direct attention to the fact that he has, at the instance of  
numerous correspondents, opened an agency for the purchase and sale of Stocks  
and Shares.

Mr. WILSON has had a life-long initiation into the mysteries of British and  
Foreign Mines, both as a large holder of shares and manager of companies, and  
he thinks he is qualified by long and dear experience to give sound and honest  
advice as to investments in such securities.

All transactions must be for cash, or for fortnightly settlement, and speculative  
bargains in mining shares will not be entertained without substantial cover.

Mr. WILSON subjoins a list of mines with whose intrinsic or prospective merits  
he is intimately acquainted.

East Crebor. East Van. Derwent. Leadhills. Lead Era. Morla Du. Brazilian Gold. Colombian Hydraulic. Consolidated. Devala Moyer. Emma.	North Herodsfoot. Parys Copper Corporation. Roman Gravels. South Caradon. Wheal Basset. Wheal Grenville. Frontino and Bolivia. Richmond. Ruby. South East Wynad. South Indian.
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**NORTH HERODSFOT.**—These shares are strongly recommended for a rise.  
The shaft is cleared to the 70, and within ten days the men will be in the 50  
and 80 fm. levels, where it is known that a rich body of ore is standing. Shares in  
demand; price 11s. to 13s.

**WHEAL BASSET, £5 2s. to £6 2s.** A circular from the purser announcing an  
important discovery has been sent to each shareholder. Shares will go to £10.  
LA PLATA have declared their fifteenth monthly dividend of 9 per cent. per  
annum, carrying forward \$50,000. Shares in active demand, and should be  
bought at once at the present low price of £1 3/4 per share.

West Caradon, East Van, Parys Copper, and Roman Gravels good to buy.

**MESSRS. ENDEAN AND CO., STOCK AND SHARE  
DEALERS, 85, GRACECHURCH STREET, LONDON, E.C.  
ESTABLISHED 1861.**

**BANKERS: LONDON AND WESTMINSTER, Lothbury; and  
BARCLAY, BEVAN, and CO., Lombard-street, E.C.**

**MR. JOHN RISLEY, STOCK AND SHARE BROKER,  
38, CORNHILL, LONDON, E.C.  
ESTABLISHED 20 YEARS.**

WEST CARADON, PARYS, and NEW WEST CARADON specially recom-  
mended.  
SHARES BOUGHT OR SOLD ON COMMISSION.

**JOHN BANTING ROGERS, STOCK AND SHARE DEALER,  
ST. CLEMENT'S HOUSE, LOMBARD STREET, LONDON.**

**E KINS AND CO., STOCK AND SHARE DEALERS,  
14, QUEEN VICTORIA STREET, LONDON, E.C.  
Special information respecting Tin, Lead, and Copper Mines.**

**INVESTMENTS.**—The BEST SELECTIONS for QUICK  
PROFITABLE RETURNS from Sound marketable Securities—the outlay  
comparatively small, the gain frequent and considerable, the latter having  
doubled the amount of the former last account. Our selections for this account  
important. Great results expected.  
Address, Messrs. HUME and Co., Financial Agents, Crosby Hall Chambers,  
London, E.C.  
N.B.—Mine Shares also Bought or Sold.

**F R A N C I S F R A N C I S,  
CORN EXCHANGE CHAMBERS, CHESTER,  
Has SPECIAL BUSINESS in HALKYN DISTRICT DRAINAGE, RHYDALUN,  
RHODESMOR, NORTH HENDRE, and PEN-YR-ORSEDD.  
Also, in PITANGUT (Gold), BRAZILIAN GOLD MINES, SANTA BAR-  
BARA, and WEST FRONTINO.**

**MR. JOHN L. M. FRASER  
(Fourteen Years at the Great Miners' Mines)  
CONSULTING MINING ENGINEER, &c.,  
GREENFIELD HOUSE, WREXHAM.**

WILL VISIT the Mining Districts of MINERA, LLANARMON, MOLD,  
DERESBY, and BRITISH SILVER-LEAD next week. Instructions received  
up to Tuesday's post.

**ON SALE—HORIZONTAL, VERTICAL, and PORTABLE WINDING and  
PUMPING ENGINES, LIFTS OF PUMPS, PIT HEADS, SAW BENCHES,  
MINING STEEL, a complete SET OF GOLD MINING PLANT, &c. Enquiries  
courted.**

Investors should at once apply for particulars of certain Mines that will  
advance in price from 30s to 500 per cent.

## INCREASED VALUE OF WATER-POWER.

## MACADAM'S VARIABLE TURBINE.

This Wheel (which is now largely in use in England, Scotland, and Ireland) is the only one yet invented which gives proportionate power from both large and small quantities of water. It can be made for using a large winter supply, and yet work with equal efficiency through all variations of quantity down to a fifth, or even less if required. It is easily coupled to a steam-engine, and in this way always assists it by whatever amount of power the water is capable of giving, and therefore saves so much fuel.

This Turbine is applicable to all heights of fall. It works immersed in the tail-water, so that no part of the fall is lost, and the motion of the Wheel is not affected by floods or back-water.

References to places where it is at work will be given on application to—

**MACADAM BROTHERS AND CO., BELFAST.**

## WIRE ROPES.

**JOHN AND EDWIN WRIGHT**

PATENTERS.



ESTABLISHED 1770.

**MANUFACTURERS OF EVERY DESCRIPTION OF IMPROVED**

## Patent Round and Flat Wire Ropes

From the very best quality of Charcoal and Patent Steel Wire. Galvanised Wire, Ropes for Ships' Rigging, Galvanised Signal and Fencing Strand, Copper Rope, Lightning Conductors, Colliery Ropes and Steam Plough Ropes made from the best Patent Improved Steel Wire.

**PATENT ROUND AND FLAT HEMP ROPES,** Hemp, Flax, Engine Yarn, Cotton Waste, Tarpauling, Oil Sheets, Brattice Cloth, Wagon Covers, &c., &c.

UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.

UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM.

CITY OFFICE—No. 5, LEADENHALL STREET, E.C.

All communications to be forwarded to the BIRMINGHAM ADDRESS.



PARIS, 1867.



ORDER OF THE CROWN OF PRUSSIA.



FALMOUTH, 1867.

**A DIPLOMA—HIGHEST OF ALL AWARDS—**given by the Geographical Congress, Paris, 1875—M. Favre, Contractor, having exhibited the McKean Drill alone as the MODEL BORING MACHINE or the ST. GOTHARD TUNNEL.

**SILVER MEDAL** of the Highland and West of Scotland Agricultural Society, 1875—HIGHEST AWARD.

At the south end of the St. Gothard Tunnel, where

## THE MCKEAN ROCK DRILLS

Are exclusively used, the advance made during eight consecutive weeks, ending February 7, was 24'90, 27'60, 24'80, 26'10, 38'30, 27'10, 28'40, 28'70 metres. Total advance of south heading during January was 121'30 metres, or 133 yards.

In a series of comparative trials made at the St. Gothard Tunnel, the McKean Rock Drill continued to work until the pressure was reduced to one-half atmosphere (7½ lbs.), showing almost the entire motive force to be available for the blow against the rock—a result of itself indicating many advantages.

The GREAT WESTERN RAILWAY has adopted these Machines for the SEVERN TUNNEL; the LONDON AND NORTH-WESTERN RAILWAY for the FESTINIOG TUNNEL; and the BRITISH GOVERNMENT for several Public Works. A considerable number of Mining Companies are now using them. Shafts and Galleries are driven at from three to six times the speed of hand labour, according to the size and number of machines employed, and with important saving in cost. The ratio of advantage over hand labour is greatest where the rock is hardest.

These Machines possess many advantages, which give them value unapproached by any other system of Boring Machine.

THE MCKEAN ROCK DRILL IS ATTAINING GENERAL USE THROUGHOUT THE WORLD FOR MINING, TUNNELLING, QUARRYING, AND SUB-MARINE BORING.

The MCKEAN ROCK DRILLS are the most powerful—the most portable—the most durable—the most compact—of the best mechanical device. They contain the fewest parts—have no weak parts—act without SHOCK upon any of the operating parts—work with a lower pressure than any other Rock Drill—may be worked at a higher pressure than any other—may be run with safety to FIFTEEN HUNDRED STROKES PER MINUTE—do not require a mechanic to work them—are the smallest, shortest, and lightest of all machines—will give the longest feed without change of tool—work with long or short stroke at pleasure of operator.

The SAME Machine may be used for sinking, drifting, or open work. Their working parts are best protected against and accidents. The various methods of mounting them are the most efficient.

**N.B.**—Correspondents should state particulars as to character of work in hand in writing us for information, on receipt of which a special definite answer, with reference to our full illustrated catalogue, will be sent.

PORTABLE BOILERS, AIR COMPRESSORS, BORING STEEL, IRON, AND FLEXIBLE TUBING.

The McKean Drill may be seen in operation daily in London.

**MCKEAN AND CO. ENGINEERS**

OFFICES.

5, RUE SCHIZÉ, PARIS

MANUFACTURED FOR MCKEAN AND CO. BY

MESSRS P. AND W. MACLELLAN, "CLUTHA IRONWORKS, GLASGOW."

# SAMUEL DENISON & SON'S WEIGHING MACHINES

ARE THE BEST IN THE MARKET FOR

ACCURACY, DURABILITY, AND DESIGN.

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Manufacturers of every description of IRON BUILDINGS and IRON ROOFING, beg to draw attention to their Speciality of Construction of Iron Buildings, now becoming so generally approved by the introduction of galvanized iron louveres to open and shut, as per sketch (verandah may be added). Any of the spaces in walls can be made into doors, or they can be filled in from top to bottom with galvanized corrugated iron, or with galvanized iron louveres or windows, and with without light and ventilation in roof.

WORKS: OLD FORD, LONDON.

Numerous drawings may be seen at the Office, 47, MOORGATE STREET, LONDON.

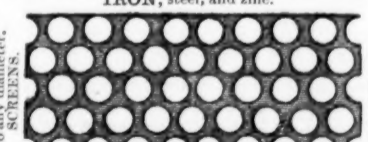
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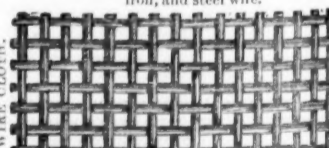
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Manufacturers of Stamps-Grates, Sieves, and Riddles, for Mining and other purposes, by Self-acting Steam Machinery.

**SPECIALITY.**—Thick Copper, Brass, Zinc, and IRON Perforations, Classifying-Sieves, Pierced Pulveriser and Stamps-Grates up to 289 holes to the square inch, Copper-bottom "Tinsifts," Spigot and Faucet Zinc Air-pipes, Powder Charges, &c.

**CERTIFICATE OF MERIT**  
Awarded by the Mining Institute of Cornwall for  
-SIEVES AND GRATES,  
Shown at the Annual Exhibition, 1879.

Lineal holes per inch woven in copper, brass, iron, and steel wire.



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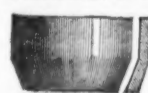
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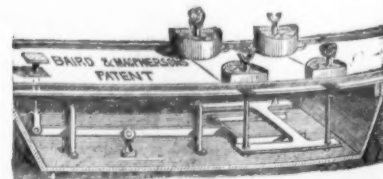


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With 3 Cast Steel  
up to 3½ feet,  
Freestone,  
PRICE, 30s.

RATCHETS,  
Drills to Bore  
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Limestone, &c.,  
EACH.



BAIRD'S IMPROVED  
SOLID MOULDED  
GUITA PERCHA  
PUMP BUCKETS,  
Price, 3s. 9d. per lb.



BAIRD AND MACPHERSON'S PATENT TUB GREASER.

This Company having over 7000 yards run of ascertained Gold Reefs on their property of 320 acres, it is proposed to subdivide and sell portions of the Reefs.

The Devala-Moyar Gold Mining Company have recently sold 50 acres of their property for £130,000.

## The Mysore Reefs Gold Mining Company, Limited.

### MYSORE TERRITORY, MADRAS PRESIDENCY.

Incorporated under the Companies Acts, 1862 to 1880, whereby the liability of each Shareholder is limited to the amount of his Shares.

The property of this Company is described in the Revenue Map as the "Ooregum Gold Fields," and was not acquired until after a special examination had been made by Mr. John Harris, Mining Engineer, employed by Messrs. Arbuthnot and Co., Bankers, Madras, for that purpose.

Mr. JOHN HARRIS ascertained and reported:—

"THAT THE NUMBER OF QUARTZ REEFS WHICH HAVE HEAVY OUTCROPS SHOWING UP, and that may also be traced by very extensive (Native) surface workings, is six, and they can be traced from the 'OOREGUM MINE' on the north end of the field RIGHT THROUGH TO THE SOUTH END OF THIS BLOCK."

ONE OF THE REEFS RUNNING THROUGH THIS COMPANY'S PROPERTY into the adjoining Ooregum Company's block has lately been proved, and from a depth of 80 ft. 17 tons of quartz were raised, which yielded a bar of gold weighing 40½ ozs. (assay 92½ per cent. of gold, and 7½ per cent. of silver), EQUAL TO 2 ozs. 8 dwts. OF GOLD PER TON; and later reports state that 9 tons of quartz from an adjacent lead gave 27½ ozs. of Gold, and stone of equal richness is now being raised.

THIS PROPERTY FORMS PART OF THE BLOCK OF THE MADRAS GOLD MINING COMPANY, of which Sir W. W. Arbuthnot, Banker, Madras, is Chairman, and the readiness with which the capital of that company was subscribed in Madras is submitted as conclusive evidence THAT IN INDIA THE PROPERTY PURCHASED BY THIS COMPANY HAS A KNOWN AND ESTABLISHED VALUE.

THE MYSORE GOLD MINING COMPANY have also three Blocks close to this Company's property on the same auriferous reefs, and Mr. Davis, sent out by Messrs. John Taylor and Sons, says—

"That the auriferous lodes are true fissure veins, and that the most important lode has been traced north, through the Ooregum Company's property, and southward for four miles," passing, therefore, right through and beyond the Company's property.

Professor W. Vazie Simons, Mr. E. W. Lindon, C.E., and Mr. Munday have all reported most favourably on these reefs, and Professor SIMONS says:—

"Never during the course of a very large experience of Gold Mining properties in Victoria, Australia, America, and other countries have I seen a more likely field for sound enterprise—sound, because it can scarcely even be called speculation, as the precious metal has for generations been extracted in quantity by the rudest appliances and by primitive workers until stopped by water—by the presence of Gold in payable quantities on the surface."

The whole of the six auriferous lodes run through this property.

CAPITAL £120,000, IN SHARES OF £1 EACH,

PAYABLE—1s. on Application, and 4s. on Allotment; the balance of Calls at the rate of 5s. each, with one month's notice.

#### DIRECTORS.

ROBERT ANGUS, Esq., East India Merchant, 41, Russell Road, Kensington.

Major C. S. BLAIR, late Officiating Deputy Commissioner of Mysore Province, 3, Pall Mall Place.

Lieut.-Col. HENRY DAY, late Military Storekeeper, Bengal, Holcwm, Ferryside, S. Wales.

THOMAS EYRE FOAKES, Esq., Chairman of the Frontino and Bolivia Gold Mining Company (S. America), Limited.

TUFNELL SOUTHGATE, Esq., Chairman of the Roman Gravels Mining Company (Limited).

HENRY WILSON, Esq., Director of the Ooregum Gold Mining Company (Limited).

PETER WATSON, Esq., Chairman and Managing Director of the Devon Great Consols Company, Director of the Great Laxey Mining Company, &c., Austin Friars—LONDON MANAGER.

THE AGRA BANK (Limited), 31, Nicholas Lane, and THE ALLIANCE BANK, Bartholomew Lane, E.C.—BANKERS.

Messrs. LANE AND ANDREWS, 32, Essex Street, Strand—SOLICITORS.

CONSULTING ENGINEER—Professor W. VAZIE SIMONS.

AGENTS IN INDIA—ARBUTHNOT and CO., Madras.

SECRETARY—Mr. R. HODSON.

LONDON OFFICES,—18, AUSTIN FRIARS, E.C.

#### PROSPECTUS.

This company has been formed to purchase and work about half a square mile of gold-bearing land, having six ascertained auriferous reefs running through it. It is situated at an elevation of 3000 ft. on the Mysore Plateau, in the district of Kolar, in the Mysore Territory, about five miles from the Camasamudrum Railway Station, to which there is already a cart-road.

The vendor derives his title to the land and mining rights from the Madras Gold Mining Company (Limited), who hold a sub-lease from the concessionaires, to whom the original lease (including this and other property) was granted by the Government of Mysore. The sub-lease to be purchased by the company is for a term of 30 years less a few days, from the 13th of August, 1880. The rent payable under this sub-lease is small, with an annual royalty payable to the Government of India of £5 per cent. on the value of the gold raised. The Government is so desirous of encouraging the introduction of capital into the country for mining purposes that it is believed that this royalty will not be demanded, at all events for some years.

The property covers about 320 acres, with a run of about 1200 yards north and south on the course of the auriferous quartz reefs, and a width of about 1290 yards from east to west. The land has been selected in this way so as to take in all the main reefs and as little barren ground as possible.

The Ooregum Gold Mining Company, the Mysore Gold Mining Company, and the Madras Gold Mining Company have properties immediately adjoining this company's on the north and south, and the same auriferous reefs traverse each property. The present market value of the shares of the above companies affords tangible proof of the estimation in which the reefs are held:—

	Per cent. premium.
The Ooregum Gold Mining Company's shares ...	300
The Mysore Gold Mining Company's shares ...	150 to 175
The Madras Gold Mining Company's shares ...	50

This company's property is part of a tract of country which is described in the revenue maps as the Ooregum Gold Fields.

The native were in the habit of working these fields in the rudest and most primitive manner, and they appear to have been unable to devise means for getting rid of the water beyond a depth of 12 fms.; thus they have only worked at the off-shoots from the main lodes, which are all true auriferous fissure veins.

One of the auriferous lodes which runs through this property into the adjacent Ooregum Gold Company's block has been proved to a depth of 90 ft.; and, at about 80 ft. from surface, 17 tons of quartz were raised, which yielded a bar of gold weighing 40½ ozs. (assay 92½ per cent. of gold and 7½ per cent. of silver), equal to 2 ozs. 8 dwts. per ton, and later reports state that 9 tons of quartz from an adjacent lead gave 27½ ozs. of gold, and stone of equal richness is now being raised.

This property has been specially examined and reported upon by Mr. John Harris, mining engineer, for Messrs. Arbuthnot and Co., Bankers, of Madras.

The following are extracts from his report, dated May 10, 1880:—

"The number of quartz reefs, which have heavy outcrops showing up, and that may also be traced by very extensive (native) surface workings is six; they can be traced down from the Ooregum Mine on the north end of the field right through to the south end of this block, which is called the Mathamangalum block. The run or course of the reefs is in a northern or southerly direction; they run tolerably parallel to each other, and dip from 45° to 70°. The colour of the quartz below the surface of the ground is of a dark bluish grey, and is far more auriferous than the pure white quartz."

"All the reefs, together with the head and foot walls of trap-rock, appear to be very regular, and from a superficial survey no fault or break in the ground is found."

"Several samples of quartz taken from the reefs haphazard, crushed and washed, all gave a good show of gold."

Professor Simons, in reporting upon the same reefs which run through this property, says:—

"Not only in every watercourse examined, but also from the dust collected along the lines of the reefs, fine gold in considerable quantities was, in every instance, the result of very rough washings by women with their 'Muriyas,' or shallow wooden basins, giving me ample proof of the highly auriferous nature of the reefs and their surroundings."

"In ages gone by the whole face of the country appears to have been cut up by the ancient miners, whose considerable excavations I came across in every direction; and it is a matter of historical notoriety that enormous quantities of precious metal were annually extracted by these old workers until they were stopped at a depth of about 70 ft. by the influx of water, which they had no appliances to contend against effectually."

Water sufficient for all requirements, it is anticipated, will be supplied by the mine pumps; and good storage obtained by repairing at a small cost the present bleached tanks on the block.

Timber for mine purposes can easily be brought by rail from Calicut and abundance of fuel is obtainable on the spot at 8 rupees per ton. Labour to any extent can be obtained from the surrounding villages at about 6d. per day.

The result of the workings on the adjoining Ooregum Gold Company's block shows that at a depth of 15 fathoms, levels can be driven, and auriferous lodes which traverse this property can be worked, yielding quartz which assays 2 ozs. 8 dwts. per ton. The directors have every right from past experience to assume that this average will increase with depth; they have based their calculations of profit upon mining, milling, and reducing, during the second half of the first year, 50 tons per day, and this would give the following results on a yield of 1 oz. per ton:—

1 oz. of gold per ton of quartz on 50 tons per day equals 50 ozs., at £3 10s. per ounce .....	£175 0 0
Cost of mining, milling, and reducing 50 tons per day, at 12s. per ton .....	30 0 0
Profit per day .....	£145 0 0

It is estimated that six months will be ample to get the mines and reduction works into a state capable of yielding and operating upon 50 tons per day. Thus during the second six months of the existence of the company a profit of (say) £145 per day on 150 days can be earned, or a total of £22,750 on six months' work.

During the second year the mining and milling operations would be increased to 100 tons per day, with the following estimated results:—

1 oz. of gold per ton of quartz on 100 tons per day, equal to 100 ozs., at £3 10s. per ounce .....	£350 0 0
Cost of mining, milling, and reducing of 100 tons of quartz per day, at 12s. per ton .....	60 0 0
Profit per day .....	£290 0 0
300 days at £290 per day shows an annual profit of	£87,000 upon a yield of 1 oz. per ton.

The following is an estimate of the capital required to work 100 tons of quartz per day, with the resulting profit upon 1 oz. of gold per ton:—

Estimate of working 100 tons of quartz per day, yielding 1 oz. of gold per ton.

#### EXPENDITURE.

Machinery, plant, buildings, tramways, &c. ....	£15,000 0 0
Working capital required .....	10,000 0 0
Total .....	£25,000 0 0

#### RETURNS.

100 tons per day, equal 30,000 tons per annum, at	
1 oz. per ton, equal 30,000 ozs., at £3 10s. per oz. £105,000	0 0

#### COSTS

Mining, milling, and reducing, including management, &c., on 30,000 tons, at 12s. per ton .....	£18,000 0 0
Wear and tear of machinery, plant, buildings, tramways, &c., at 10 per cent. on £15,000 .....	1,500 0 0 = 19,500 0 0

Net annual profit upon a yield of 1 oz. per ton £ 85,500 0 0

The shallow depth to which this company will thus have to sink before the steady and regular extraction of ores commences will, it is calculated, enable the directors to make the mine a dividend paying one in much less time than is usual where greater depths have to be sunk before driving out along the lodes.

This company can therefore commence immediate operations; and the directors propose to at once order the necessary stamps and reduction plant; with this they estimate that they will in a few months be able to extract and operate upon 100 tons of quartz per day; and although the assays shew 2 ozs. 8 dwts., the directors think it safer to base their calculations upon a yield of only 1 oz. per ton.

The company is promoted by the vendor, by whom the consideration to be paid for the property has been fixed at £75,000, of which £30,000 will be paid in shares, and the balance in cash. The incidental expenses to the paid by the company will not exceed 2 per cent. upon the capital.

The following agreements have been entered into:—

Dated 1st November, 1880, between the Madras Gold Mining Company (Limited) and Charles Stevens.

Dated 12th November, 1880, between Charles Stevens and Robert Angus, as trustee for the company.

These agreements, together with the Memorandum and Articles of Association, and the reports, can be seen at the offices of the solicitors of the company.

Prospectuses and Forms of Application for shares can be obtained at the offices of the company, and from the company's bankers, brokers, and solicitors.

If no allotment is made the amount paid on application will be returned in full.

# Devon Friendship Mining Company

(LIMITED).

To be Incorporated under the Companies Acts, with Limited Liability.

CAPITAL £60,000, IN SHARES OF £1 EACH.

Ten Shillings per Share payable with application, and Ten Shillings in fourteen days after allotment.

## DIRECTORS.

H. W. LAMB, Esq., Anerley, Director of the D'Eresby Mountain Mining Company.

JAMES MACFARLANE, Esq., Gresham Buildings, Director of the Wheal Crebor Mining Company.

J. H. MURCHISON, Esq., F.R.G.S., 8, Austin Friars, E.C.

SAMUEL YORK, Esq., Wolverhampton, Director of the Tankerville Great Consols, and the Devon Great United Mining Companies.

## BANKERS.

THE IMPERIAL BANK (Limited), Lothbury, London.

## SECRETARY AND OFFICE.

MR. J. H. A. SMITH, 8, AUSTIN FRIARS.

## ABRIDGED PROSPECTUS.

This celebrated and very valuable and extensive mine is situated about 4 miles from Tavistock, Devon, and has been at work many years, during which it has yielded copper and other ores to the amount of nearly £1,500,000, out of which a very large sum has been expended on the mine (besides a limited capital); £113,436 has been paid in dues to the lessor, and £310,000 has been divided among the shareholders.

The rate of dues originally paid was 1-10th, which was reduced in 1852 to 1-18th, but in 1874 a new lease for 21 years was obtained at 1-30th, and if that rate had been payable from the beginning it would have made a difference to the shareholders of nearly £66,000, and augmented their divisible profits to £376,000.

Until the last few years there was no railway near the property; now there is a station within half-a-mile, a very great advantage as regards carriage, labour, &c.

It is considered by good practical authorities that the south part of the property is one of the finest pieces of mining ground in West Devon, and that the vigorous working of Bennet's and the other south lodes, which are as yet almost entirely unwrought, and which

run parallel to those which have been so rich and profitable in the old mine, will pay handsomely.

The quality of the copper ore, varying from 6½ to 12 per cent., bears very favourable comparison with that of other English mines.

The present profits will be much increased as the levels on Bennet's lode are drained, and the directors confidently anticipate that dividends or interest on the capital will be paid the first year.

Although the directors fully expect, with the immense quantities of arsenical pyrites in these mines, that considerable profits from this source will be made, yet it is chiefly to the copper as well as to returns of tin that they look for large and permanent favourable results. The quality of the copper ores from this property has hitherto been unusually good, while the tin found formerly was mostly thrown away.

In order to carry on the operations as quickly and cheaply as possible, boring machinery will be extensively used. It is further very important that the old part of the mines can be worked by water-power.

The only contracts are the following: one dated the 27th day of

October, 1880, between Alfred Lanyon of the one part, and John Daw and John Henry Murchison of the other part; and one dated 11th November, 1880, made between the said John Daw and John Henry Murchison of the one part, and John Henry Augustus Smith, trustee for the company, of the other part. It will be observed that Mr. John Henry Murchison, one of the vendors to the company, has agreed to be a director, and thus the shareholders will have the benefit of the services of a gentleman who is well known to be thoroughly acquainted with all details connected with mining, and whose interest as a shareholder will ensure his best attention to the affairs of the company.

A large number of the shares are already subscribed for, and in allotting the remainder preference will be given to applicants who are shareholders in the following Mining Companies:—Tankerville Great Consols, Derwent, East Roman Gravel, South Darren, Glenroy, Devon Great Consols, Devon United, Wheal Crebor, Northern, D'Eresby Mountain, Pandora.

Full Prospectuses, with Reports, can be obtained at the office, 8, Austin Friars, London.

## WATSON BROTHERS' MINING CIRCULAR.

## WATSON BROTHERS,

MINEOWNERS, STOCK AND SHARE DEALERS, &c  
1, ST MICHAEL'S ALLEY, CORNHILL, LONDON.

THE KIRK MICHAEL MINE, in the Isle of Man (extending over 500 acres), and held under lease direct from the Crown for 21 years, and dated Feb. 29, 1868, was first discovered eight or ten years ago, and worked on one lode only; from this, at Nos. 1 and 2 shallow levels, lead ore to the value of 2878*l.* 11*s.* 11*d.* was raised and sold. The principal proprietors then died, disputes and Chancery proceedings succeeded, and eventually the mine was sold in one lot; and it has been carried on from that time at a considerable outlay underground and at surface, with a view to test and prove its value in depth and erect the necessary machinery before offering it to the public. This has been done.

The mine is worked by water-power; there is a good water-wheel, crusher, dressing-floors, and steam-engine as an auxiliary should the water at any time fall low; and the surface works have been made as perfect as possible.

The course of ore, from which 2728*l.* worth was raised from the shallow levels, is 50 fms. long, and almost continuous; and the late manager writes as follows—"It may be confidently expected that the lode will be more productive in a lower level than it was in No. 2; but, supposing it to be only the same, it would then yield about 1 ton per fathom for a distance of 50 fathoms, and if this is multiplied by 15, which is the depth in fathoms between Nos. 1 and 2, it follows that 750 tons of ore may be relied on being obtained. This at the present price would realise about 8500*l.*, subject only to the cost of raising it on tribute, royalty, cartage, and other general expenses." This is written of one level only, which is nearly reached.

During the last twelve months, in addition to the work done at surface and to the machinery, levels have been communicated to facilitate future working; and the sump-shaft has been sunk 9½ fathoms below No. 2 in a good lode, worth 1 ton of lead per fathom. During this preliminary work 30 tons of lead ore have been raised from the sump and one stop only.

In addition to this, however, there is rather an extraordinary feature connected with the mine, similar to one which in about the year 1840 made one of the greatest discoveries of lead ore ever known. This was at Foxdale, a few miles off, in a similar mountain range, and precisely under the same condition of things at Kirk Michael. Beckwith's lode at Foxdale was a soft slide vein, in places about 20 ft. wide, and the cause of the great deposit was the crossing of another lode, in itself only about 1 ft. wide, and worth about ½ ton to 1 ton per fathom, but its effect on the great slide was enormous. The deposit of ore was 60 fms. long, and lasted down to the 120 fm. level, yielding a profit of about 300,000*l.* Capt. Rowe, who inspected this great discovery in 1845, and saw a course of ore in the 50 worth 15 to 20 tons of lead to the fathom, writes in regard to Kirk Michael—"The case is nearly the same as two eggs can be; the lode now working on at Kirk Michael is a north and south lode, with a regular leader of ore quite as good as the one at Foxdale—and here also is a similar and immense east and west lode (only larger) which the north and south lode will drop into at no great distance below us. Where this great lode or slide has been seen in the adit, which is close to surface, it is impregnated throughout with mineral—lead, blende, and copper. I am sure some such great result will follow below, and it will not take much time or capital to get at it."

The mine has been brought into its present state for regular and increasing returns of lead through a considerable outlay of money; and to test the grand speculation in depth referred to, and which may occupy twelve months, the mine has been sold to a company to raise the necessary working capital, the price charged for the mine and work done being entirely taken in full paid-up shares.

The company is in 20,000 shares of 1*l.* each (limited). Of these 15,000 are taken by the vendors as fully paid up, in lieu of money. Of the 5000 capital shares 2000 may be kept in reserve.

Of the 3000 now offered at par 1000 have been taken by one gentleman, who will join the direction, and the 2000 will be allotted to first applicants, either to us or to the secretary, Mr. W. H. H. Watson. 10*s.* on application and 10*s.* on allotment.

No prospectus will be issued, and the only contract relating to the company is one dated Nov. 22, 1880, between Richard Rowe, of the first part, J. Y. Watson, Orlando Webb, James Macfarlane and C. B. Barry, of the second part, and William H. Howard Watson, of the third part, as trustee for the company; and which contract may be

seen at the office of the company, St. Michael's-alley, Cornhill, London, or at Messrs. Stacpool and Sons, Pinner's-court, Old Broad-street.

Of the above vendors, Messrs. Orlando Webb, James Macfarlane, and J. Y. Watson (all three directors of Wheal Crebor), will be members of the Board of Directors of Kirk Michael.

The company has been completely registered, and since our notice of last week several hundreds of shares have been applied for, and as a certain number will be reserved to offer the Wheal Crebor and West Crebor shareholders, early application must be made for the remainder.

Forms of application may be had at the office.

The following is a report of the mine, from which it will be seen—1st, from present discoveries laid open the mine is on the eve of making profitable returns; and, 2nd, during the sinking the shaft to the junction, where such great results are expected, and which will occupy about 12 months, a large and increasing extent of ore ground will be opened out at each successive level on the present lode:—

*Minyard, Isle of Man, Oct. 7.*—The Kirk Michael Mine is on the western slope of hills which divide it from the Laxey district, and is also about seven miles from the Foxdale Mines. The mine is in good clay-slate rock, traversed with courses of elvan, and contains several powerful lodes, but up to the present only one has been worked—a north and south lode underlying east, and in these respects resemble exactly the Great Laxey lode. The mine is in the side of a mountain 1600 ft. above sea level. Two adit or day levels have been driven into the hill side on the north and south lode, and 50 fms. of continuous ore ground discovered. The width of the lode is from 4 to 5 ft., but clearly showing a tendency to increased width in depth. During the time the mine has been in our possession levels and shafts have been cleared and communicated, and a sump sunk 10 fms. in new ground, in which the lode is found to be strong, and increasing in ore as we descend; worth now in the bottom from 1 to 1½ ton of lead per fm. A small piece of ground has been stepped away northwards from the top of the sump to prove the lode, and from the sump and slopes 25 tons of ore have been broken. In the bottom of the sump the lode is wider and richer than seen at all, and to all appearance the mine is on the eve of making profitable returns. But the great feature of the mine is a large east and west lode over 40 ft. wide, which has only been cut through, and found to be strongly mineralised. In following down the north and south lode it will drop into this immense east and west lode in about 25 fms. sinking, and at this point I believe a large deposit of ore will be found. A similar junction of two lodes in every way the same took place at the Beckwith Mine, Foxdale, and resulted in the largest deposit of lead ever found in the kingdom. In sinking for this junction on the present north and south lode a large extent of ore ground will be quickly opened out, and a profitable mine will result from the one lode alone, and the junction can be reached under 12 months. The ground for sinking is favourable, price being about 15*s.* per fm., and the lode can be stepped for 3*l.* 10*s.* per fathom, and an important feature is that the ground requires little or no timber to keep it open. There is a good wheel, necessary machinery, and water-power on the mine.—R. Rowe.

Arsenic and arsenic alone has, of late years, made Devon Great Consols what it is; the district is full of arsenical mundic, which in many of the old copper mines worked years ago was left untouched (as it had no market value); but now, owing to the price of arsenic, several mines are being started with large capitals to work for mundic. Wheal Crebor has always raised with its copper ore (eastward) a few hundreds of tons of arsenical mundic every year, and there is also a large deposit in Prince of Wales, from which the late company sold several parcels when the price was too low to do any good. In and around Kelly's shaft in Wheal Crebor tradition states that large quantities were left in the levels when the copper was taken away, and that the shaft was so hot from the mundic that men had difficulty in working it. The agents are, therefore, now clearing out the adit to this shaft with the view of discovering the quantity of arsenical mundic to be obtained, and this may have caused some demand for the shares since our last, though in fact the mine is looking better for copper.

There is as fine a lode in the shaft at West Crebor as can be seen anywhere at the depth, and the mine is a splendid speculation; but of course it will take time to develop it, and for this there is ample capital in hand.

There seems to be something coming in at the trial cross-cut at the 70 East of Gwen's shaft at Parys Corporation.

The lode of arsenical mundic at Prince of Wales is quite distinct from the present workings and can be worked dry. Formerly it was let on tribute to arsenic makers, and the manufactory is close to the lode. Of course it will receive the attention of the committee. We have said before there was no real cause for the fall in shares.

THE FORTESCUE TIN MINES.—There is some interesting reading in an advertisement which appears in our columns to-day—the Fortescue Tin Mines appeal for a little extra capital. This mine has progressed, perhaps, as fast as any in the county of Cornwall, and so prolific is said to be tin resources underground that the present machinery, although complete and powerful, is far from being able to grapple with the output of ore. The company have met with a lucky chance in the purchase of the adjoining property, replete with ma-

chinery of every kind except stamps. Subscriptions are now asked for at 2*s.* per share to erect these stamps and set two mines going instead of one. On perusal of our last page it will be seen the whole capital together is only 10,000*l.*, so there is ample room for profits. Messrs. Thompson and Sons, of Plymouth, are the secretaries and managers, to whom subscribers should apply.

WEST KITTY.—At the four monthly meeting of shareholders, held on Thursday (Mr. John B. Reynolds in the chair), the balance sheet showed cash in the hands of the bankers 304*l.*, with no liabilities excepting 70*l.* minimum rents (just due), due and unpaid. The announcement of the result of the recent improvements at the mine took the meeting completely by surprise, as it will also the public, seeing that the profitable nature of the lode at the 72 east during the last three months has resulted in the discovery of tin to the value of nearly 1000*l.* Of this 250*l.* worth has been realised, 100*l.* worth is now on the floors, and the remainder is exposed to view in and about the 72 fm. level. Those who read the articles which appeared underneath the plan in the Journal some time since will be in part prepared for this result, for there it was distinctly pointed out that the richness of the ground in this district is so great that the profits, when made, appear almost fabulous. Of course these discoveries will involve the necessity of the company's perfecting all their dressing arrangements, and if the shareholders are guided by the very business-like recommendations of the committee, they will lay out a permanent dividend-paying mine; but if there is any successful attempt to force the returns, to the detriment of future prospects, it will be cause for regret. We cannot help stating, with the Chairman's speech before us, that any such attempt, for any purposes whatsoever, will be met by irresistible opposition. The immediate value of a mine of this description is of no moment whatever to those bond shareholders who go in for dividends and not for market operations. The various points of operation, it must be remembered, are quite as good, if not better, than they ever have been at any previous period. Therefore it is clear that every week adds to the value of this undertaking. The 2*s.* call was made to meet in part the demands for further stamping power, but amongst many of the remarkable features connected with this company is the willingness with which the shareholders respond to their calls, for the whole amount asked for at the last meeting had been paid to the company's bankers, so that there were no arrears. This feature establishes the credit of the company, whilst the mine is evidently proving itself to be one of the most valuable in the district. For the particulars of the meeting, taken down by our own shorthand writer, we refer our readers to another column.

GREAT SNAEFELL.—At the annual general meeting of shareholders at Douglas on Wednesday (Mr. H. B. Noble in the chair), the directors' and agents' reports were read, and the statement of accounts submitted, showing a balance at banker's of 177*l.* 9*s.* 5*d.*, and a balance of assets over liabilities of 275*l.* 19*s.* 8*d.* Capt. John Kewley, in a letter written (Nov. 23) after the report had been forwarded, says: "The lode in the 130 level north is larger since last reported; it is now between 5 and 6 ft. wide, and the ore-bearing part about 2 ft. wide, and produces a little lead and blende. We have a good foot wall, and hanging wall, and the end on the whole has a promising appearance. We have been drawing from the 130. On the floors the men have been crushing ore stuff this last two days. The Chairman considered that a very favourable announcement. The workings of our mine hitherto have been most disheartening. Occasionally the mine holds out great prospects, but no sooner do their hopes appear about to be realised than they are blasted. In September last they had a discovery in the sole of the 130 level, which they hoped would be most valuable. It was about that time that Mr. Warrington Smyth announced his intention of coming over to see the mine, and to make his annual inspection. Only Mr. Fisher was able to come over with the chairman to see Mr. Smyth at the mine. Their great hope was that Mr. Smyth would see the mine to great advantage, but they were disappointed, for when Mr. Smyth went underground the discovery had run out, and not a particle of ore was to be seen. That is, unfortunately, the kind of ground which the Great Snaefell possesses."

REGISTRATION OF PUBLIC COMPANIES.—Some misapprehension exists as to the liability of applicants for shares in a company intended to be registered but not yet so. Such applicants having given no authority, direct or implied, to pledge their credit, incur no liability whatever till the contract with them is complete—by the allotment of shares, which cannot take place till after the registration of the company. If no allotment is made they are entitled to their deposit back in full.

TECHNICAL MUSEUMS AND LIBRARIES.—At the Manchester Scientific and Mechanical Society Mr. Alderman W. H. Bailey read a paper in which he said that municipal corporations in this country are the direct descendants of the ancient trade guilds and peace clubs, and that they might acknowledge with gratitude what has been done for us by enlightened municipalities. The catalogue of the mining and manufacturing section of the Wigan Free Library was referred to as an illustration of what might be done at the Manchester Free Library for the benefit of technical education. As to their museum, he suggested that the cases of stuffed birds should be replaced by objects of interest to those engaged in the trade of the district, and that each district should have a different style of museum; one at Halifax would be different to one at Bolton, and so on. He considers it would be less costly and more beneficial to let each have its speciality. It might, he thought, be worthy of consideration by the members of scientific societies in the Manchester district whether they should not make another attempt to obtain for educational

purposes some of the surplus money of the 1851 Exhibition. He believed a museum and library for technical purposes would be beneficial, and that we must understand physical science, the science of the earth, if we wish to use the forces of this earth in a respectful manner. The paper was listened to throughout with marked attention, which it well merited.

# THE SILVER PEAK MINING COMPANY.

It is seldom that we have had to consider the prospectus of an enterprise which appears to be so thoroughly satisfactory in every particular as that now before us. Its object is the acquisition and full development of one of the richest and largest mines in the richest of all silver producing districts, Colorado. For full particulars we must refer our readers to the prospectus and the reports by which it is accompanied, but as they are voluminous, we propose to give a *resumé* of this valuable property. The Silver Peak is situated in San Juan, Colorado, and the Company have acquired a freehold mineral property of about five miles of lodes in lineal measurement by 300 feet wide. This is held free from all royalty under the mining laws of the United States Government and of the State of Colorado. They have also acquired all the property underground, through which the tunnel will run, the mining rights to which are secured by the Location Laws of the State. To work this property to the greatest advantage, it is proposed to drive a tunnel through the mountain, and to erect at Animas Forks smelting works of sufficient dimensions, not only for the ore of the Company, but for that of the adjacent mines, the owners of which have now to convey the ore on the backs of mules over the mountain to the nearest smelting works. The ore itself appears to be unusually rich, the Assay giving an average of 150 to 200 ounces of pure silver to the ton of ore. In particular samples this average has been vastly exceeded, the United States Government official assay having certified that they contained silver to the extent of 50 to 1400 ounces per ton of ore, and one sample (in addition to silver) gave 144 dollars of gold per ton. The property has been inspected by Mr. Joseph Taylor (of the firm of Messrs. J. Taylor and Co., London Wall, Mining Engineers), whose reports can always be depended on for their careful accuracy. Mr. Taylor states that he is "thoroughly convinced that Colorado is destined to become one of the richest mining districts in the world when fully opened out and developed." He says that "the rocky mountains seem to be one bed of mineral; and as to this particular property he tells the Directors that they "will have a mine of extraordinary wealth," and that on the completion of the tunnel, they will have "one of the best and greatest mines in the Western States of America." He also backs his report and opinion by joining the Board of Directors, and consenting to proceed to Colorado personally to superintend the driving of the tunnel, the erection of the smelting works, and the general development of the enterprise. So that we have the head of one of the most respectable firms of mining engineers prepared to throw in, as it were, his experience and his fortunes in the development of this undertaking. We are not surprised at this, for unbounded wealth seems at the very door, only requiring experience and energy to secure it. The mine is of vast extent, the ore is in abundance, and rich in silver; there is a cheap and abundant supply of coal, and the water power is almost unlimited, while the facilities of transit, both by the tunnel and railway are perfect; with these advantages, combined with good management, success and large dividends are a foregone conclusion. A glance at the map which accompanies the prospectus will show that, apart from the almost inexhaustible mineral wealth of the mine, the company must derive a large revenue from the minor rills of income. The smelting works are to be erected on the "placer claim," at the mouth of the tunnel, and as a constant supply of coal can be obtained at moderate rates, smelting will be conducted speedily and at the lowest cost, so that every mine in the neighbourhood will find it advantageous to send its ore to be smelted at the Company's works instead of as now carrying it at a considerable cost and loss of time over the mountain. This of itself would yield a large revenue. Then in the valley of the "Poughkeepsie Gulch," there are numerous mines of great wealth, the whole produce of which will pass through the tunnel on its completion, the tolls from the carriage of which will form a very large additional source of revenue. In the face of such a valuable project, we are glad to see such excellent materials for its perfect and judicious development. We notice the directorate is strong, the chairman being Mr. T. Eyre Foakes, whose successful management of the "Frontino and Bolivia" Company is well known, and two directors of the celebrated and flourishing "Richmond" are on the board. We understand that a large number of shares have been already applied for, and those of our readers who desire an allotment should be on the alert.

**THE BRAZILIAN GOLD MINES.**—Official advices announce that already gold has been found at each point reached in the Descoberto, the Matia Matta, and the Servicio Velho, indicating that as soon as the unworked veins are reached the most favourable anticipations will be realised. In the Jacotinga section, of which the company own an entire mountain, gold has also been found, although the crushed workings were not then cleared, showing the Jacotinga is auriferous. At this early stage of operations it would be imprudent, the manager says, to express sanguine views, in case undue expectations might be raised, but the directors say "that as at the date of these advices the old workings were not cleared, yet gold had been met with at every point, they felt the shareholders will join with them in regarding the information to hand as highly encouraging."

**LAST CHANCE.**—It is stated that the re-construction of this company is being steadily and quietly proceeded with, and that in a few days time the public announcement of the new company may be looked for. The amount required for working capital has, it is added, been fully subscribed.

**SEVENTH SILVER-LEAD AND BLENDE MINE (Pyrenees).**—This justly celebrated mine is now proving as rich, if not richer, than when in the height of its prosperity, before the outbreak of the Franco-German war in the year 1869, the whole staff, consisting of about 400 men, were compelled to join the army. The mine was then sending 200 tons of a very rich class of silver-lead monthly to market, when operations had to be suspended. After the war was over no attempt was made to resuscitate the concern until the formation of the present company, and although it has only been in their possession for considerably less than two years yet the results fully justify the expectation that there is a brilliant future in store for the fortunate shareholders. The present company declared a dividend of 10 per cent. last January, and it is more than probable that another on a considerably increased scale will be declared immediately. The returns for the last month consisted of 225 tons of a very superior class of silver-lead and 600 tons of blende notwithstanding the interruptions caused by the great severity of the weather. As the company is divided into 60,000 shares of only 1s. each, which is a ridiculously small sum for an enterprise of such magnitude, it stands to reason that the future dividends will be unexceptionably high. The mine contains enormous reserves of ore laid open sufficient, as it were, to last a life time. The lode is of great strength and fertility, and abounds in subterranean riches. It is a pity to see the shares in this company only quoted at 2s. to 2l. 10s., which would represent 100,000l. to 125,000l. for its entirety, whilst it has been valued by some of the most eminent mining experts at considerably over 300,000l.

**THE CLOAGU MINING COMPANY.**—More than the capital asked for in last week's Journal having been subscribed the list will close to-day. Letters of allotment and regret will be posted in a few days.

**TANKERVILLE GREAT CONSOLS.**—The allotment letters were posted on Wednesday, the number of shares applied for being nearly 8000 above the total to be allotted. It was in 1870 that Mr. Murchison introduced the Tankerville property to his friends, and having been the originator of the late company (which has since paid nearly 60,000l. in dividends), it must be satisfactory to him to see the successful floating of the amalgamated company is due greatly to the position attained by that property; while the capital now available will allow it to be more effectually worked than perhaps circumstances have hitherto permitted. We sincerely trust that the shareholders will be amply rewarded for the warm support they have given to the undertaking. We are confident that under the really able and energetic management of Capt. A. Waters, the success of the enterprise will be as large as the united properties are capable of yielding.

**EAST DEVON CONSOLS.**—The adit end going west is emitting more water, which is highly mineralised. Some rich stuff in the bottom part of the level has been broken this week, and it is very evident they are passing over a large course of ore. Some of the ore

83,333 of the Shares are reserved for payment to the Vendors, and 86,453 Shares have been privately subscribed, leaving a balance of 80,214 Shares to be applied for.

THE

# Silver Peak Mining Company, Limited.

Incorporated under the Companies Acts, 1862, 1867, and 1877.

CAPITAL £250,000, IN 250,000 SHARES OF £1 EACH,

2s. per share to be paid on application, 2s. per share to be paid on allotment, and the balance in calls when required. Subscribers may pay up their shares in full on allotment, in which case they will be entitled to dividends on the amount so paid.

## DIRECTORS.

T. EYRE FOAKES, Esq., Chairman of the Frontino and Bolivia Gold Mining Company (Limited).—CHAIRMAN.  
The Hon. RANDOLPH STEWART, 85, Eaton Square, W., Directors of the Richmond Consolidated  
HERMAN SCHULTZ, Esq., 71, Great Tower Street, E.C., Mining Company (Limited.)  
CHARLES H. WILKINSON, Esq. (Messrs. Wilkinson and Co.), Britannia Mills, Leeds.  
RICHARD J. JENKINS, Esq., C.E. (Messrs. Newton, Jenkins, and Co.), King William Street, London, E.C.  
\*JOSEPH TAYLOR, Esq. (Messrs. J. Taylor and Co., Mining Engineers and Inspectors.)  
\* This gentleman has consented to join the Board as Managing Director upon the transfer of the property.

## BOARD OF REFERENCE—NEW YORK.

E. W. ANDREWS, Esq., Director of The Exchange Telegraph Company (Limited), Cornhill, London, and President of The New York District Telegraph Company.  
FRANKLIN J. PRATT, Esq., 57, Broadway, New York, and Greenfield, Massachusetts.  
BANKERS—THE LONDON AND COUNTY BANK (Limited), Lombard Street, E.C., and its Branches.  
SOLICITORS—Messrs. WILD, BROWNE, and WILD, 10, Ironmonger Lane, E.C.  
AUDITORS—Messrs. KENDRICK and WALTER, Chartered Accountants.  
BROKER—ALBERT RICARDO, Esq., 11, Angel Court, E.C., and London Stock Exchange.  
SECRETARY—M. PHILLIPS, Esq.

REGISTERED OFFICES,—8, TOKENHOUSE YARD, BANK, E.C.

## PROSPECTUS.

This company is formed for the purpose of purchasing and developing a vast and exceedingly valuable freehold mineral property about five miles in lineal measurement on the course of the lode, by 300 ft. wide on the average, held free from all royalty under the mining laws of the United States Government, and of the State of Colorado, besides all the acquired property underground not held on the surface, through which the tunnel will run, the mining rights to which are secured by the Location Laws of the State.

The property comprises the freehold ownership of a large number of well defined silver lodes and branches, contained in one of the richest mineral mountains yet discovered, and situate close to Animas Forks, in San Juan county, Colorado. A telegraph has already been established to the property, and rail communication will be obtained by the new branch of the Denver and Rio Grande Railroad, now being built from Alamosa to Silverton (distance 16 miles from the mine), which is expected to be completed shortly, the facilities thus afforded for rapid and cheap transport will greatly increase the value of the property.

This mountain or peak, being part of the great silver producing range extending down to Mexico, has been proved to consist of immense quantities of most valuable argentiferous lodes, very rich in silver, bearing mineral which by independent public and private assay, has given an average of 150 to 200 ozs. of pure silver to the ton of ore.

Samples of ore have been taken from the several different veins already cut in the tunnel, and a U.S. Government official assay certified that they contained silver to the extent of 1400 ozs. per ton of ore, and one sample (in addition to silver) gave \$14.47 gold per ton.

The lodes, already located, and held free by the laws of the State, are—

1. The Ella Mehle lode.
2. The North Hampton lode.
3. The Charlemont lode.
4. The J. B. Norris, or Burrows No. 3, lode.
5. The San Francisco lode.
6. The Star of Empire lode.
7. The Olympia lode.
8. The Manie Pratt lode.
9. The Brooklyn and Brooklyn Extension lode.
10. F. J. P. lode.
11. The San Juan lode.
12. The Chris Mehle lode.
13. The Milwaukee lode.
14. The Spencer B. Root lode.
15. The McGinnis lode.
16. The Hancock lode.
17. The Andrews lode.
18. The Colorado Miner lode.
19. The Silver Plume lode.
20. The Placer claim lode.
21. The Bonanza Tunnel Site Location.

The property has been inspected by Mr. Joseph Taylor (of the firm of Messrs. J. Taylor and Co., London Wall, Mining Engineers), and pronounced by him to be one of the most valuable he ever saw, and that it is, in his opinion, capable of almost unlimited development.

The following is an extract from Mr. Taylor's letter accompanying his report to the directors:—"I have recently been informed, on most reliable authority, that the J. B. Norris lode has been cut rich, and contains very high grade ore, of which I observed every indication when there. I would strongly advise the vigorous prosecution of the tunnel, believing, as I do, that when this is complete you will have one of the best and greatest mines in the Western States of America, and at a very moderate price, having regard to the enormous quantity of ore in sight, and the character of the lodes running through the entire property, and certainly one that can be worked much more economically than most mines, as the various lodes can be developed entirely without pumping and drawing machinery, thus avoiding a very serious item of expenditure."

Since Mr. Taylor inspected the mine, some most important and valuable additions have been made to the property, amongst which is the now celebrated vein known as the "Colorado Miner Lode." This gigantic mineral deposit is larger, richer, and of far greater value by itself than many entire mines, it being over 100 ft. wide on the outcrop, and is confidently believed to contain an almost incalculable amount of rich silver ore.

The enormous mineral wealth contained in this exceptional concentration of rich lodes will be developed (under the immediate superintendence of Mr. Taylor) by means of a tunnel which is being cut directly through the mountain, at a surface elevating from 200 to 1300 ft., and of a total length of about 700 ft., and is located in the very heart of its mineral bearing centre, and will cut all lodes that appear upon the surface, besides all the "blind lodes," "branches," and "flyers" developed in the prosecution of the work.

The advantages obtained by the tunnel system over the ordinary method of shaft sinking and working are not only numerous, but of the highest importance in an economic sense. Principal among others, is the fact that while a shaft can only operate as to one mine, a tunnel, as in this instance, can cut through and develop nearly 40 mines for 750 ft. on each side. Besides this, it is the only means by which the great depths—at which the richest ores are generally found—can be attained without almost a ruinous outlay. By dispensing with the enormous expense incident to drawing and pumping machinery, as well as the labour and delay incidental to the shaft sinking, it makes the entire work self-drawing, and furnishes such an easy delivery for the ores at the mouth of the tunnel by tramway as to permit of an almost unlimited capacity of production. This in itself constitutes the most valuable of all advantages to be secured in mining enterprises. Viewed with due reference to these considerations, this company may be justly considered as one of the best mining enterprises ever yet brought to the notice of investors, and it is so considered by all mining authorities who have examined the locality.

has been recently assayed, which gives 13½ per cent. for copper, and also a good percentage of silver. All practical men who have inspected the mine agree with the agent in speaking of the mine with the fullest confidence.

**DEVON FRIENDSHIP.**—A correspondent points out that the magnificent water power at these mines will enable them to be drained and carried off very cheaply.

## AUSTRALIAN MINES.

**ENGLISH-AUSTRALIAN GOLD.**—The directors have received advices from their agent at Fryerstown, who state that the new drawing engine is now at work, and that crushing has been recommenced. In the eight days before the departure of the mail 330 tons of stone had been passed through the mill, but the gold produce was not stated, as the clear up would not be made till the end of the month.

**YORKE PENINSULA.**—The directors have advices from the committee of inspection at Adelaide, with reports from the Kurilla Mine to Oct. 5. The following are extracts from Thomas and John Anthony's report.—Kurilla Mine: At the 67, east of Hall's engine shaft, about 7 fms. are driven on the lode; about 5 fms. from the shaft a pocket of rich ore was found, producing about 3 tons, but the drive is now poor. At the 55 and 18 fms. east from the shaft some ore was driven through, but what has occurred at the 67 is not far enough east, nor is the ore of the same class as that, but identical with what we do not expect to find nearer than 35 fms. further east. It will not be a matter of surprise if from the 67 downwards the lode will make ore at and about the said shaft. At the 45 east the south part of the lode is now 6 ft. in wide of average ore, but we consider the prospect very fair, having ore further east at the upper levels. At the 15 east the lode has a good north wall, and all the surroundings favour ore, but there is not sufficient to pay. The slope in the 55 east is yielding an average of 3 tons of 20 per cent. ore per fathom, while two men are making wages on the south part of the lode, in the 45, at 9s. 6d. in 1l. It is intended shortly to put down a winze from the 55 to the 87 in the ore, 18 fathoms from the shaft, after which the sinking of Hall's shaft should be resumed.—Morphett's Lode: We continue to drive east and west of the tunnel, in the 55, the lode averaging a yield of 4 tons of 16 per cent. ore per fathom, with great regularity. In the 45, both east and west, winzes are being put down on the above drives about 30 fms. apart, and the average yield of ore is 4 tons of 16 per cent. per fathom. In the 43, 30, and 20 east, in the ends, at present the lode is disordered by the elyap

The tunnel has already been driven considerably over 1000 ft. through great bodies of ore, which are now available for working. The vendors have spent large sums of money in driving the tunnel, to which work they have hitherto directed their sole attention, but it is now intended (as suggested by Mr. Taylor) by the aid of additional capital, to work the Yangton and J. B. Norris lodes (by levels and stopes driven right and left on the course of the various lodes), along with several rich "flyers" and branches which have been discovered and cut through. The tunnel will at the same time be vigorously pushed forward, diverting its course about 4° in a south-westerly direction from the Milwaukee lode, as to cut through the middle of the Colorado Miner lode, and obtain an outlet in the Poughkeepsie gulch, as also advised by Mr. Taylor in his report.

The directors confidently anticipate that the shareholders will have an interest in one of the largest and best paying enterprises of modern times, and one which promises to yield unusually large dividends.

Attention is called to the Richmond Consolidated Mining Company, which since it was taken up and managed by an English board of directors has paid its capital back to the shareholders twice over; the £5 shares are now selling at £15 10s. to £16, and dividends are being paid at the rate of 10s. per quarter, along with a bonus dividend at the end of the financial year (last year the net earnings were equal to 50 per cent. per annum on the capital), and it may fairly be assumed that the dividends earned by this company should be equal to those paid by the Richmond.

Near the mouth of the tunnel is the Placer claim of 20 acres, with all mill rights and water power secured, the upper portion of which forms a natural A, with high mountain boundaries on each side, through which runs a rapid stream. This will be utilised by erecting a dam across the base of the triangle, at the point marked B on the plan, and thus create an immense reservoir, which will contain many millions of gallons of water, and by this means an unlimited supply of water power for washing and dressing ores will be secured at the smallest possible cost.

In order to secure the largest amount of profit, the company intend to erect their own reduction and smelting works on the Placer claim at the mouth of the tunnel; but while this is being done a ready market for all the ore produced will be found at the various reduction works in the immediate vicinity of the mine.

The fact that coal of the best quality and in inexhaustible quantity exists in the vicinity of the mine will give the company the means of smelting at the lowest possible cost.

The mountain is bounded on the south-west by a ranch or valley called the Poughkeepsie Gulch in which are situate numerous silver mines of great wealth, many of which are in full work.

It is intended to make the reduction and smelting works sufficiently large and powerful, not only to do all the company's work, but to absorb all such profitable work from every mine in the immediate neighbourhood, more especially the rich ores from the mines in the Poughkeepsie Gulch, the whole of which will be trammed through the tunnel as soon as it is open.

The ore extracted from the whole of the mines in the Poughkeepsie Gulch has at present to be carried over the mountain to the nearest smelting works on the hillsides, and great interest is now taken in the development of one tunnel, which will afford a ready means of transport to the eastern side, and a very large revenue will accrue to this company from tolls levied on all ore passing through it.

One of the smelting works in the neighbourhood belonging to Mr. Senator Hill turns out \$250,000 worth of bullion per month.

The company is entitled to a toll or royalty for drainage from all other mines worked overhead; and a further profit will be realised from a toll levied on all ore extracted from mines belonging to other proprietors in the immediate vicinity, which, with the permission of the directors, may be worked from levels driven right and left of the tunnel.

The requirement of the Stock Exchange that two-thirds of the capital of a company quoted in their Official List must be allotted to the public, precludes the vendors accepting more than one-third of the total capital of the company in shares in part payment of the purchase money, otherwise they would have taken the whole of it in shares, but they and their friends have already applied for a large amount.

Attention is called to the fact that the entire management of the company will be under the control of the board of directors in London.

Mr. Taylor is so impressed with the value of the property that notwithstanding his numerous engagements in this country he has consented to go to Colorado for a sufficient time to initiate the new management, and fix the sites for the water dam, the reduction and smelting works, and report to the board as to completed levels and stopes on the lode already cut.

The vendors will pay all costs of agency and brokerage, and the further expenses, including all legal, advertising, printing, and other charges incidental to the formation of the company up to the allotment of shares.

The Contract of Sale, with inventory of plant, machinery, &c., and a copy of the Memorandum and Articles of Association, are open for inspection at the offices of the solicitors of the company, and all further information may be obtained from the secretary. Particulars and Forms of Application can be had at the Registered Offices of the Company, 8, Tokenhouse Yard, and from the London and County Bank and its several branches. Application may be made by letter addressed to the secretary, stating the number of shares required, accompanied by a remittance of 2s. per share as deposit on application.

rock; the extension of these eastern levels through poor ground is a heavy tax, but the lode in section 393 yielded a large quantity of ore further east, and it would appear that the only proper way is to push ahead until the hard bar is got through. In the 10 some good ore has been driven through, but we are not certain the south wall of the lode is reached, and are driving south with the double object of testing the width of the lode and hoisting to a hauling shaft put down by the late Devon Consols Company; 24 men are stopping this lode from the 43 upwards, and are raising therefrom the bulk of the ore being shipped to England. We may add that this lode has opened out most satisfactorily, and is richer at the 55 than at any shallower point. In the north branch, or new lode, north of Morphett's lode, the only exploratory work being done on the lode is the driving at the 10 east, in section 393, by two men. Six men are engaged on tribute, and stopping between the 43 and 10 on this lode. About 9 ft. more have been driven west at the 8, on the New Devon lode, and the lode which is on the new property, and about 115 fms. south of Kurilla lode, is even still more promising than when we reported on it in August last. As soon as an air shaft is put down on the drive a tribute pitch may be set, which will pay for all the labour bestowed on it up to this time, and the ground now being driven through is also payable.—Ore Returns: 203 tons had been dispatched from the mine for shipment to England, and there remained on hand at the mine on Oct. 4 564 tons of 15½ per cent., and 445 tons of low-class ore of nearly 5 per cent.

**VINCENT.**—In the Supplement to to-day's Journal will be found a letter from a shareholder, who has lately visited the mine, which gives an account of the discoveries of tin ore lately laid open close to surface. Some large samples of the ore are now in London, and are considered by those competent to judge to be of such a quality as has seldom been met with, some of them running to 500 lbs. of tin to the ton of ore.

**THROAT IRRITATION.**—Soreness and dryness, tickling and irritation, inducing cough and affecting the voice. For these symptoms use Epps's Glycerine Jujubes. Glycerine in these agreeable confections, being in proximity to the glands at the moment they are excited by the act of sucking, becomes actively healing. Sold only in boxes, 7½d., and 1s. 1½d., labelled "JAMES EPPS and Co., Homoeopathic Chemists, London." A letter received: "Gentlemen—It may, perhaps, interest you to know that, after an extended trial, I have found your Glycerine Jujubes of considerable benefit (with or without medical treatment) in almost all forms of throat disease. They soften and clear the voice. In no case can they do any harm.—Yours faithfully, GORDON HOLMES, L.R.C.P.E., Senior Physician to the Municipal Throat and Ear Infirmary."

## Mining Correspondence.

## BRITISH MINES.

**ABERLLEN.**—J. Roberts, Nov. 24: The valley crosscut is still in the same kind of rock that it has been for some time past, with the same kind of heading joints covered with blende. No. 3 crosscut is still in the same kind of hard dark stone. There is 1 fathom more to drive to get to the perpendicular of the hanging side at No. 2, and with a little heave by the slide, and the lode being a little more perpendicular than at No. 2, we should scarcely have cut it yet; however, I purpose to put those men to sink a winze from No. 2 down to the slide, about 8 fathoms, to prove the lode to that depth, as well as to see what influence the slide will have upon it. No. 2 end has a very showy, gossany lode in it, but at present there are only occasional stones of lead and blende, but I expect that it will improve shortly as we get nearer to the course of blende in the shaft behind the cottage.

**ARENDAL.**—J. Daw, J. Daw, jun., Nov. 17: Yesterday we were underground with Capt. Thomas, who was here inspecting. The mines, we are pleased to inform you, are looking very well.—Skytmyr Mine: In the 60 east the lode is 3½ ft. wide, worth 4 tons of copper ore per fathom. The winze sinking in the bottom will yield 2 tons per fathom. In the 60 west the lode is 2½ ft. wide, composed of quartz and munde, and will yield 1 ton of copper ore per fathom—a kindly lode, but not rich. At Benson's shaft the lode is large, but not rich, yielding good stones of ore. We think we are just now taking the run of ore ground coming down to the west of the shaft. In the 50 east the lode is 2½ ft. wide, and will yield 2½ tons of copper ore per fathom—a very kindly end. We have three winzes sinking in the bottom of this level, yielding together fully 5 tons to the fathom. The rise in the back of this level is worth full 2 tons of copper ore per fathom. The winze in the bottom of the 15 is worth full 2 tons per fathom. The stope is yielding very satisfactorily.—Bollstad Mine: The shafts and bottom levels are clear of crystalline quartz, a good deal of blende, and the 20 and 20. We have resumed the driving of the 40, east and west, and rising and stopping in the 40 east. The sinking of the shaft will be proceeded with as early as possible. The lode in the shaft is over 5 ft. wide, composed of quartz, munde, and copper ore, worth for the latter 3 tons per fathom. In the 40 east the part carried of the lode is about 6 ft. wide, the composition being the same as in the shaft, and will yield over 2 tons of ore per fathom. The rise and stope in back of the lode is a good one, and we are now busily engaged in clearing the 30 and 20. It appears the deeper we go the munde or iron disappears, and quartz, mixed with richer copper ore, come in its place. We are well pleased with the look of the lode, and judging from present appearances we shall soon be raising a great deal of ore per month from this mine. In the 40 west the lode is large, but at present is not yielding much ore, although just behind the end there is a fine lode. The dressing is progressing as well as we can with the present machinery, 200 tons have been shipped for October, and we hope, if the weather permits, to have another cargo of 200 tons, more ready by the end of this month. The erection of the machinery is being pushed on as fast as the nature of the work will admit; we hope to get it ready by the middle of January, or at the latest by the end. The weather is now very stormy, snowing fast, with high winds, but not cold, to hinder dressing or any other work.

**ASHETON.**—Joseph Garland, Nov. 24: We have cut through the new branch in the cross-cut near the 80, east of Boundary shaft, and find it to be 9 in. wide, composed of quartz, blende, and munde, and the weather is favourable we hope to commence pumping on Saturday next. A full report will be sent for the general meeting, to be held on Dec. 2.

**BELOWDA.**—J. H. Collins, Nov. 23: All is going on well, although not so rapidly as I could wish, or as would be the case if I could get a few more good men. We stamped 77 tons of stuff with our 24 heads of stamps last week in four days' working, or an average of over 19 tons per day, but I expect to exceed that average this week, and to stop the days on account of the repairs. On the dressing-floors we have now three round buddles at work, and the finishing buddle is now ready. As soon as the new stamp lifters arrive (which were ordered last week) we shall work the whole battery of 48 heads of stamps. Meanwhile our underground operations are not neglected. We are preparing to raise the necessary quantity of tinstuff to keep all the stamps going, and shall be easily able to do it from our Beacon Burrow lode before reported on. Other satisfactory points are being also opened up in the mine, of which I shall be able to report in due time.

**BLAEN CAELAN UNITED.**—J. Pell, Nov. 25: I am unable to advise you of any alteration. The stope in back of the 30 is looking better, but the 20 stope west of engine-shaft is very full of munde. The frost was so severe that from Saturday last no dressing would be carried on, but it is now wet. I have suspended the driving on lode towards Esgair-hir, south of Caelan brook.

**BLUE HILLS.**—S. Bennett, R. Harris, Nov. 20: The 80 ends, both east and west, are producing tinstuff of low quality. The 42 east end, on the north lode, is changing, the lode being harder, but as yet it is poor. The west end in this level is without much change. The 30 east end is worth 8½ to 10½ per fathom.

**BODIDRIS.**—H. Hotchkiss, Nov. 23: There is little or no alterations in our underground workings this week, but all points are going on very regularly. The deepening of Meadow shaft below the 110 is highly satisfactory, the ground being more favourable for breaking. The winze is being continued down at fair speed on the lode, which is much the same in character as when I wrote you last, with a good mixture of blende in the lode near the hanging side, and the lode is strong and well defined. The 50 east has a nice sprinkling of lead ore in the end, with favourable indications of an early improvement. No change in the 17 east; the main body of ore here has certainly taken an up or down throw, which at present I am endeavouring to find out.

**BWLCH UNITED.**—N. Bray, Nov. 24: At the 50 the men have commenced driving on the slide, and particulars of the change will be duly reported from time to time. The 100 is being driven east in a lode 3 ft. wide, composed of clay slate and quartz, with patches of blende, and a good deal of lead ore. I am hoping for an improvement at this point, which would add very greatly to the prospects and value of the property. The stope between the 50 and 60 maintains about its average yield for lead ore, and the same may be said of the stope against the slide in the back of the 60. We have cleared over 5 fms. of the old working above the 40, and I hope to get up to the 30 shortly. The snow and frost have again disappeared, and our surface work is going on steadily.

**CAMBRIAN.**—Lyle Glanville, Nov. 23: Esgair Ffrith: Copper and Eastern Shaft. On Sunday, the 14th inst., we had such a nice sprinkling of lead ore in the lode, and we were successful in preventing its flowing down the two shafts, but the engine and wheel succeeded in forcing the mine by Sunday last. On the previous Saturday we cut into a very nice lode in the 106 yard level, east of eastern shaft, containing 1 ft. of copper ore and about half a yard of copper and lead ore mixed, but since that day, in consequence of the water being in, but little has been done at this point; it is to-day, however, looks about the same. In the 70 yard level, driving east of eastern shaft, we have a very fine lode, composed of gossan, green carbonate of copper, and some patches of rich copper ore. We may look forward to a great and early improvement at this point. In consequence of the drawback to our dressing operations, I have discharged the floor pare, but shall be able to employ them again on Monday next. I regret I am unable to send you a more satisfactory report.

**CARNARVON COPPER.**—John Roberts, Nov. 24: Monthly Report: During the past month we have driven at the 90, towards the sump at the 80, 1 ft. 5 in. We cut an open joint running nearly in the direction of the slide, and as it was letting out a great deal of water, we thought at first that it was the fault in the lode, but it was not. We have, however, discovered the fault in the lode caused by the slide, which shows clearly that it cannot be far off. By the plan which I sent you last week you will see clearly our position in relation to the sump at the 80. The ground is a little easier for driving, and I hope that we shall make better progress. At Talmigedd we have driven on the course of the sulphur 1 ft., and also sunk 1 ft. There are all the time good stones of copper in the sulphur, and the under is such that it does not improve. The same may be said of the lode at Cae-y-Groes, where the lode is a little better, but the engine and wheel succeeded in forcing the mine by Sunday last. On the previous Saturday we cut into a very nice lode in the 106 yard level, east of eastern shaft, containing 1 ft. of copper ore and about half a yard of copper and lead ore mixed, but since that day, in consequence of the water being in, but little has been done at this point; it is to-day, however, looks about the same. In the 70 yard level, driving east of eastern shaft, we have a very fine lode, composed of gossan, green carbonate of copper, and some patches of rich copper ore. We may look forward to a great and early improvement at this point. In consequence of the drawback to our dressing operations, I have discharged the floor pare, but shall be able to employ them again on Monday next. I regret I am unable to send you a more satisfactory report.

**COURT GRANGE.**—Jas. G. Green, Nov. 24: The mine is in fork to the 65, and we shall soon have the shaft clear and driving in the cross-cut resumed. The rise in the 45 is worth 12 cwt. per fathom, but the ground is exceedingly hard. The 30 will be cleared of stuff this week ready for rock drills, and we have put in a small along the back, so that stope can be carried on at the same time as driving. The underhand stope in the 14, and also the stope in back of the 14, east of foot-level, have both improved during the week. There is no other change to notice. All the machinery is in good order, and every effort is being made to repair damages done by the recent frost; we have at this date 20 tons of ore in store.

**CLEMENTINA.**—J. Roberts, W. Sandoe, Nov. 24: In the end, driving north at the 34, there is a little lead on the footwall, and altogether a kindly lode, which must shortly improve, as the lead in the north stope is dipping in that direction. The stope is not looking quite so good as they were, but you are quite aware that this is the nature of the lode, and sometimes pinched up rather small, and at other times to open out wider and richer.

**CWMYSTWITH.**—Nov. 24: In the 15, to drive east of Pugh's cross-cut, on the new lode, by rock drill, the ground is favourable for driving, and the lode is getting more defined. From the appearance of the ground we may expect to cut into the ore ground shortly. The 8, west of Edward's winze, on the new lode, is suspended, and the men put to drive the same level east. In the 8, east of Edward's winze, on the new lode, the lode is 2 ft. wide, and worth 16 cwt. of lead ore per fathom. Nine stope will yield, on average, 15 cwt. of lead ore per fathom. Four stope will yield 13 cwt. of lead ore per fathom.

**DENBIGHSHIRE CONSOLIDATED.**—A. Francis, R. Prince, Nov. 25: We have taken the men from No. 1 rise, in the 112 east main lode, and set them to drive a cut on the same lode, at a point nearer the engine-shaft, as by doing so we shall be working this part of the mine to greater advantage, and more economically. The run of ore upon which they have worked we have set to tributors at 120s. per ton for clean lead. No. 2 rise continues to look very well, and is worth 2 tons of lead per fathom. Nine stope will yield, on average, 15 cwt. of lead ore per fathom. The 78 yard level, is now in the productive ground that was worked in the level above, and we expect daily to report having got into a good body of ore. We are making better progress on the dressing-floor.

**DERESBY CONSOLS.**—J. Roberts, W. Sandoe, Nov. 24: We have let the end, driving east from Sutton's shaft, to four men, at 9½ to 10s. per fathom, for 1 ft.; the lode is pinched up small and poor, but a little lead is coming in again in the roof, and we fully expect to meet shortly with the shoot of ore gone down from the bottom of the shallow adit. The end, driving west from Sutton's shaft, is let to two men, at 8½ to 10s. per fathom; the lode is 1½ ft. wide, with good spots

of lead in it—a very kindly lode. There is a very nice branch of ore with tributors in the bottom of the shallow adit.

**DERESBY MOUNTAIN.**—J. Roberts, W. Sandoe, Nov. 24: No. 6 cross-cut, in the lode, is progressing favourably. There are good patches of lead in the lode, but have not yet reached the other richer part. It is in the level as in the stope we shall get to it in a foot or two more driving. In the stope at No. 5 we have the same kind of poor piece in the lode, and in taking up the stope from the sump, on the hanging side, we have to work this way to reach the richer part; and, having now put a good stope over this, we are now breaking much richer stuff than we had been, and the appearance of the stope is now very good. We have as many men working as can be conveniently employed. Since we had severe frost that has impeded our progress a little in dressing, but we are now in full swing again.

**DERWENT.**—John Morpeth, Nov. 23: The list of bargains let her on Saturday last accompanies this.—Jeffries Shaft, Middle Vein: The 95 east, still carried 9 ft. wide, yields for this width 20 cwt. ore per fathom. No. 1 stope, in back of same, is 9 ft. wide, worth 14 cwt. of ore per cubic fathom. No. 2 is 8 ft. wide, worth 12 cwt. (cubic), and No. 3 is 4 ft. wide, and yields 17 cwt. The flats over the same level yield 20 cwt. ore per cubic fathom. The respective worth of the three stopes in the back of the 95, west of shaft, is 14, 13, and 12 cwt. ore per fathom—average width of vein, 4 ft. The 70 upon the Sun vein, east of shaft, continues poor; vein 2 ft. wide, and produces 6 cwt. ore per fathom.—Westgarth's Shaft, Middle Vein: The stope under the 93, east of shaft, is 3 ft. wide, and worth 15 cwt. ore per fathom, and over this level the respective worth of the several stopes is 14, 12, 15, 13, and 10 cwt. ore per fathom—average width of vein, over 4 ft. The North vein, in the rise over the 93 opposite shaft, we raised up the flat has a little more improved again. The present worth is 20 cwt. ore per fathom for whole length of rise, 10 ft.; the distance risen last month, 1 ft. 3 in. 4 in. The stope over the 74, at the junction of Middle and Burnishalls Haugh vein, yields 19 cwt. ore per fathom; vein 3 ft. wide. The cross-cut at the 63, at Westgarth's towards north vein, was driven last month 8 fms. 6 in. We have not cut any more strings or branches since that we passed through nearly three weeks ago, and we are still pushing the cross-cut ahead with a hope of having something stronger before us. Most wintry weather; frost most intense, and snow on the moors has a little more, but drifting this morning that carts cannot go to the depot for coal and with lead. Drawing was stopped this morning, but dressing in some of its branches is still working.

**EAST CARADON.**—James Kellow, Nov. 24: During the past month the winze below the 150 on the caunter lode was sunk 1 ft. 4 in.; the lode is without change. The men have been hindered a good part of the same owing to the quickness of water having lost the lift and difficulties having occurred to regain the same, together with some work in the shaft. We hope to make better progress in future. Sinking by nine men, at 40s. per fathom. To sink the winze below the 130 east on the lode 1 ft. 4 in., by nine men, at 27s.; it measures 1 ft. 1 in. 6 in. It is 4 ft. wide, chiefly munde, with quartz and peach, intermixed with a little ore. To drive the main cross-cut south at this level 1 ft. 4 in., by four men, at 18s.; it measures 5 ft. 6 in. To drive the 90, east on Fawcett's lode, 1 ft. 4 in., by six men, at 15s.; it was driven 5 ft. The lode is 1 ft. wide, composed of quartz, peach, and munde, and some good stones of copper ore. To drive the 70, west on this lode, 1 ft. 4 in., by six men, at 6s.; it measures 5 ft. The lode is 9 in. wide, composed of quartz, munde, and prain, intermixed with some black oxide of copper. Two tribute pitches are working by two and four men respectively at tributors of 15s. in 14.

**EAST CHIVERTON.**—R. Southey, Nov. 24: I am now up from underground. The rise between the 90 and 74 will be holed this week, when we shall resume driving west in the former level, and put on more hands to stope the back of the latter.

**EAST DEVON CONSOLS.**—J. Browning, Nov. 25: The prospects of the above mine are still exceedingly good, and such as to justify the most sanguine expectation. The adit end going west is emitting more water, which is highly mineralised. We broke some rich stuff in the bottom part of the level this week. It is very evident we are passing over a large course of ore. I feel certain that we shall open up a rich mine as we gain in depth. We have recently had some of the lode stuff assayed, which you will see by the enclosed statement from the assayer produced 12½ tons of pure copper, and 100 tons of lode stuff, a good fact for silver. It would be superfluous for me to add that all practical men who have inspected our mine agree with me in speaking with the greatest confidence as to the value and bright prospects of the East Devon Consols.

**EAST ROMAN GRAVELS.**—A. Waters, Nov. 25: The 109 cross-cut south-west towards main lode is going out in a hard section of country rock, which looks favourable to the production of lead ore. The 97 south is in a lode 3 ft. wide, composed of spar and rich blende stuff, but there is at present no lead ore in the lode. The 96 is in a lode 3 ft. wide, composed of quartz, munde, and prain, intermixed with some black oxide of copper. Two tribute pitches are working by two and four men respectively at tributors of 15s. in 14.

**EAST VAN.**—W. H. Williams, Nov. 25: The cross-cut B B is in full course of driving, and we are making good progress at cross-cut E E.

**EAST WHEAL BULLER.**—W. Tregay, Nov. 25: The ground in the 40 cross-cut is favourable for driving, and congenial to the production of copper ore.

**EAST WHEAL CREBOR.**—George Rowe, Nov. 24: We have intersected a small cross-cut in the 79, west of shaft, which has disordered the lode, changing its character into arsenical munde mixed with copper ore to the amount of 3 tons per fathom; the lode is improving as we open it inside this cross branch, consequently we think the change is only temporary. The lode in the 70 east is producing spots of munde mixed with ore. The lode in the stope below the 60 is worth in places from 10s. to 25s. per fathom. We are progressing very satisfactorily with a small staff of hands in our dressing department, and are getting some good quality of lead ore and munde for the market.

**FORTEQUE (Stannagwyn).**—J. H. James, H. B. Harris, Nov. 23: We have opened on the great chamber lode, which we find is over 20 ft. wide, yielding good work for tin; we shall now begin to sink on its course. The lode in the eastern stope on main lode is over 20 ft. wide, yielding rich work for tin. The western stope and middle stope continue to yield the usual quantity and quality of tin, copper, silver, and arsenic.

**GAWTON COPPER.**—G. Rowe, G. Rowe, jun., Nov. 20: The lode in the 117 east, in fact, has done so for several years past, being the mine's main source for the property. The operations were on the old Wheal Rose lode, and the engine-shaft sunk to the 60, and the level extended some distance, but I cannot say how far, as I have not been below the adit level. In the operations the lode I have heard has been from 4 to 5 ft. wide, which is composed principally of brown and spathose iron and silver-lead ore; the latter was the only ore that was marketable, and in places the lode was worth 4 tons of lead ore per fathom of 22s. or more per ton, and a large amount of lead sold for the ground. But the whole of the iron ore was not marketable in the stope, some being drawn to surface and thrown on the shaft burrows and laid over the roads on the mines refuse. To the east of this lode 30 fms. is Harvey's lode, and shaft has been sunk to the shallow adit level, and from this point about 50 tons of iron and some silver-lead has been raised; the lode here has a very promising appearance for making very large quantities of mineral in depth. Nothing has been done on this lode below the adit level; I should say this lode of lead ore would be a good one, and the engine-shaft sunk to the 60, and the level extended some distance, but I cannot say how far, as I have not been below the adit level. In the operations the lode I have heard has been from 4 to 5 ft. wide, which is composed principally of brown and spathose iron and silver-lead ore; the latter was the only ore that was marketable, and in places the lode was worth 4 tons of lead ore per fathom of 22s. or more per ton, and a large amount of lead sold for the ground. 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formation. Better progress will now result, and the lode intersected before long, when we shall be enabled to greatly increase our underground operations in this direction. All those who are acquainted with the mine, and the position of the lode in the southern ground, have great expectations with regard to the yield of ore as soon as the above points are in working order. Surface: Nothing could be better than the way in which our machinery is working, and the surface arrangements are complete.

**POLROSE.**—W. Bennett, C. Roach, Nov. 24: We have not yet cut the lode in the 90 cross-cut north, but we are still meeting with spots of mende, showing that the ground is mineralised, which is a favourable indication. The men are making good progress with the 90 cross-cut south. There is no change to notice here beyond that we have passed through another branch, composed of flookan and munde. The Margaret lode in the 90 west is opening out larger, and yielding a little tin, but it is not quite so productive as when last reported.

**PORT NIGEL.**—Joel Manley, Nov. 25: The lode in the 68 is producing some good lead, worth from 10 to 15 cwt. of lead ore per fathom, but from the appearance to-day it will soon improve. The lode in the winze is of the same character and value. We have commenced to case the shaft. I hope to commence driving the 90 west engine, in a vein of lead ore, for 231 ft. 17 in. 6 d.

**PRINCE OF WALES.**—J. Andrews, Nov. 24: The dividing and casing of the shaft is now completed to the bottom of the mine; also the ladder road in the engine shaft; and in the early part of next week we shall commence to clear the choke east of shaft, and resume the driving of the 90 west. There is no change in the deep adit cross-cut north, nor in the stope in back of the deep adit on Goodluck lode since last reported on.

**ROMAN GRAYLIS.**—A. Waters, Nov. 25: The 125, going north of the caunter lode, north of the new engine, is in a vein of lead ore, composed of carbonate of lime, with stones of lead ore and blende. The lode in the same level, going south of shaft, is 4½ ft. wide, yielding good stones of lead ore. In stopping the bottom of the 110 north, towards the flat-roof shaft, we find the lode to be worth 1 ton per fathom. We have a length of 9½ fathoms more to stope here, after which our tramroads can be laid down from the new shaft to the flat-roof shaft, and all the ground above the 110, north and south of the latter points made available for stopping. The lode in the 110 south is 2½ ft. wide, worth ¾ ton per fathom, and improving; I expect a great improvement here shortly. The part of the lode lode carried in the 95 south is 3 ft. wide, worth ¾ ton per fathom. The 80 south is worth 5 ton per fathom on the middle portion of the great lode. The 65 south, on the east part of the lode, is worth 1½ ton per fathom. The end on the foot-wall side is worth ¾ ton per fathom. The winze going down in the centre of the lode, now 11 fms. 1 ft. 6 in. deep, is worth 2 tons per fathom; this point will be holed to the 30 by the end of this month. The stope generally are yielding their usual quantities of ore. We sold to-day 225 tons of lead ore for 231 ft. 17 in. 6 d.

**SOUTH CONDERW.**—Wm. Rich, W. Williams, A. King, Nov. 23: The 98 east is letting out more water than usual, and looks promising to improve; lode worth 8½ per fathom. The stope in the back of this level is worth 12½ per fathom. The 80 east appears to be getting into more settled ground; the lode in the end is worth 7½ per fathom. The rise in the back of the 80 is worth 15½ per fathom. We have not yet completed stopping down the bottom of the winze in the 80 west. The 70 east is suspended for the time to allow the men to strip down the north side on the footwall, as we think the main part of the lode is standing in that direction. The stope behind this end is worth 12½ per fathom. The 70 cross-cut south is being urged on towards the lode in congenial-looking granite. The stope in the back of the 70 west is worth 10½ per fathom. The 60 end, west of Plantation shaft, has a promising appearance, and yields low quality tinstone. The 60 end, east of King's, is worth 7½ per fathom. The 50 east is worth 12½ per fathom. The 40 end east is worth 12½ per fathom. The lode in the winze below the 80, at Boundary shaft, is worth 7½ per fathom, and the ground is for about 500 tons of tinstuff. The sale for Wednesday will be about from 5 to 6 tons of tin.

**SOUTH DARREN.**—H. James, Nov. 25: Setting Report: There is nothing new to report on in the shaft; we are nearly deep enough to cut out cistern pit, lift lift, and start off drivings at the 120; this will be done with all speed as soon as we get the water out to the bottom. The 110 end to drive west, by six men, at 10½ lbs. per fathom; the lode is worth 1½ ton of lead ore per fathom. The sinking of the winze from this level to the 120 has been let to six men, at 12½ lbs. per fathom; we are sinking in the rock for speed, but have lately cut into the lode about 5½ fms. below the level to prove it, and find it a good ore lode for lead and copper ores. No. 1 stope, in the back of this level, by six men, at 4½ lbs. per fathom; the lode is worth 7 cwt. of lead and 7 cwt. of copper ore per fms. No. 2 stope, by two men, at 4½ lbs. per fathom for stopping, and 5½ lbs. for rising 1 fm. long, worth 8 cwt. of lead and 7 cwt. of copper ore per fathom. A stope in the back, east of shaft, by six men, at 4½ lbs. per fathom, and 6½ lbs. for rising 6 ft. long; the lode is worth 12 cwt. of lead and 7 cwt. of copper ore per fathom. The 100 to drive west, by four men, at 10½ lbs. per fathom, the lode is small and poor; but, judging from the ore ground in the level above, I expect an improvement soon. The sinking of the winze in this level has been let to six men, at 14½ lbs. per fathom, and it will soon be down to the 110, and driving commenced; we are sinking by the side of a good ore lode. No. 1 stope, in back of the 100, by four men, at 7½ lbs. per fathom, and 12½ lbs. for rising 1 fm. long; lode worth 10 cwt. of lead ore per fathom. No. 2 stope, by six men, at 8½ lbs. per fathom; lode worth 9 cwt. of lead ore per fathom. No. 3 stope, by six men, at 7½ lbs. per fathom; lode worth 10 cwt. of lead ore per fathom. There are six tribute pits, pitched to let to 19 men, two at 9½ lbs. per ton for lead ore and 40½ lbs. per ton for copper ore, one at 9½ lbs. per ton for lead ore and 30½ lbs. per ton for copper ore, one at 8½ lbs. per ton for lead ore and 30½ lbs. per ton for copper ore, one at 7½ lbs. per ton for lead ore and 30½ lbs. per ton for copper ore, one at 6½ lbs. per ton for lead ore and 30½ lbs. per ton for copper ore, one at 5½ lbs. per ton for lead ore and 30½ lbs. per ton for copper ore, one at 4½ lbs. per ton for lead ore and 30½ lbs. per ton for copper ore, one at 3½ lbs. per ton for lead ore and 30½ lbs. per ton for copper ore, one at 2½ lbs. per ton for lead ore and 30½ lbs. per ton for copper ore, one at 1½ lbs. per ton for lead ore and 30½ lbs. per ton for copper ore, one at ½ lb. per ton for lead ore and 30½ lbs. per ton for copper ore, one at ¼ lb. per ton for lead ore and 30½ lbs. per ton for copper ore, one at 1/8 lb. per ton for lead ore and 30½ lbs. per ton for copper ore, 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**WHEAL UNY.**—H. Eddy, M. Rogers, jun., Nov. 25: The lode in the 172 end west is worth 10s. per fathom. The lode in the 160 cross-cut east is 10 ft. wide worth 10s. per fathom. A lode in the back of this level is worth 8s. per fathom. Three lodes in the back of the 150 east are worth on an average 11s. per fathom. A lode in the back of the 150 west is worth 12s. per fathom. The lode in the back of the 140, east of King's, is worth 13s. per fathom. The 140 end, east of sump, on the north part of the lode, is worth 15s. per fathom. A lode in the back of this level is worth 25s. per fathom. The lode in the back of the 120, east of King's, is worth on an average 12s. per fathom. The lode in the 100 end, east of King's, is worth 8s. per fathom.

**TORR AND LANCASTER UNITED.**—J. Borlase, Nov. 24: Skelhorn Mine: We have just completed fixing our new 9-in. lift, which I am glad to say is working first-class. The shaft is now about 8 fms. below the adit level sinking on the Barn lode, the width of which I cannot say, as we are only carrying the barytes part, which is 2½ ft. wide, of good quality. By the side of the barytes we have a spar, almost fluor-spar, about 1 ft. wide, presenting a very kindly appearance, and it being so intermixed with lead it produces saving work. As we are now fairly masters of the water we hope soon to be at the 10, when we shall cut plat, and cross-cut the lode to ascertain its exact width; when last cut through at the adit it was 30 ft. wide, composed of barytes, spar, and calamine, with good stones of lead. The barytes lode in the back of the adit level shows a face of 8 to 10 ft. wide, of barytes of good quality, and from which we can at any time pay the working expenses of the mines. Our main object at present is depth, for in sinking our shaft we shall drain the old mines sunk by the old men on the east and west lode, which crosses the Barn lode about 25 fathoms north of our engine-shaft. No. 1 is 5 fms. deep, and No. 2 is 15 fms. below the adit, in the bottom of which we are informed there is a branch of lead 6 in. wide, and a good branch of blende. When we have completed the shaft 10 fathoms below the adit we shall start for the intersection, on which we hope to have something good; and, looking at the character of both lodes and the congenial stratification in which they are embedded, I cannot see how they can fail to be productive, at comparatively speaking, a shallow depth.

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**BROKER FOR THE SALE OF PIG-LEAD, LEAD ORES,  
COPPER ORE, COBALT, MANGANESE, CARBONATE OF  
BARYTES.** ESTABLISHED 1866.

### The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, NOV. 25, 1880.

IRON.	£ s. d.	£ s. d.
Fig. GMB, f.o.b., Clyde	2 12 3	2 12 4
" Scotch, all No. 1	2 14 0	—
" Bars, Welsh, f.o.b. Wales	5 2 6	—
" " in London	5 12 6	—
" Stafford	6 15 0	—
" in Tyne or Tees	5 10 0	—
" Swedish, London	10 0 10	10 0
Rails, Welsh, at works	5 5 0	5 10 0
Sheets, Staff., in London	3 0 0	—
Plates, ship, in London	7 5 0	7 10 0
Hoops, Staff.	7 0 0	—
Nail rods, Staff., in Lon.	6 10 0	6 15 0
STEEL.	£ s. d.	£ s. d.
English, spring	13 0 0	13 0 0
" cast	30 0 0	40 0 0
Swedish, keg	15 0 0	—
" fag. ham.	15 0 0	—
LEAD.	£ s. d.	£ s. d.
English, pig, common	15 5 0	15 10 0
" " L.B.	15 12 6	15 17 6
" " W.B.	16 0 0	—
" sheet and bar	16 5 0	—
" pipe	16 15 0	—
" red	17 10 0	18 0 0
" white	22 0 0	24 0 0
" patent shot	13 10 0	—
Spanish	15 0 0	—
NICKEL.	£ s. d.	£ s. d.
Metal, per cwt.	15 0 0	16 0 0
Ore, 10 per cent. per ton	20 0 0	25 0 0
QUICKSILVER.	£ s. d.	£ s. d.
Flasks, 75 lbs., war. (nom)	6 7 6	6 10 0
SPELTER.	£ s. d.	£ s. d.
Silesian, Sw.	15 15 0	16 0 0
English, Sw.	16 10 0	—
Sheet zinc	19 15 0	21 0 0

\* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; 1X 6s. per box more than 10 quoted above, and add 5s. for each X. Terns-plates 2s. per box below tin-plates of similar brands.

**REMARKS.**—A very fair amount of business continues to be transacted in most metals, and the tone on the whole keeps satisfactory, nevertheless, with the exception of tin, there is no unusual manifestation of activity in the markets, and in instances where a fair return can be had, from the transactions there is disposition to realize and secure profits. Credit is good and finance easy, and these are the chief causes to which the better feeling can be attributed, although favourable reports of the state of the trade in some of the colonial markets also tend to stimulate buyers to effect purchases before any further advance be demanded. There does not appear much prospect of any expansion in the export demand yet awhile, for advices from New York show that the navigation with the North American ports is already closed, while the unfavourable Indian exchange forms a great drawback to the progress of business with the Indian markets. It is therefore seen that business with the two largest countries to which our chief exports are made is likely to remain restricted for some little time, and, consequently operators who take so sanguine a view of the future, evidently base their opinions upon some other influences than those already referred to. It may be they look for renewed speculation by which higher prices would be realized, on account of the encouraging report of the state of trade abroad as well as the improved condition of the trade for home consumption, which restores confidence, and causes a feeling of hopefulness to prevail. Nevertheless while the markets remain cheerful there is no general endeavour to push up prices or speculate to any material extent just yet. Here and there a speculative movement is seen, some active buying for sharp and forward delivery having been effected, but as regards the legitimate demand, there is barely so much done as a few weeks back, and no particular increase seems likely to be made until the turn of the year, unless a reduction be made in prices, which at the moment does not appear probable. Owing to the large speculative interests which exist, the market may be maintained, as it will probably necessitate operators to continue to enable them to realize their present holdings without submitting to heavy sacrifices. Last week's traffic returns show an improvement, and this may have been one of the causes to which the steadiness of the markets this week can be attributed, for every feature which bears the slightest influence upon the trade is brought forward by sellers, and enlarged upon as much as possible so as to give more tone to the markets, and, if practicable, to push up prices to higher figures.

**COPPER.**—In consequence of consumers in France being reported rather bare of stock, the market here this week for Chili bars has assumed a more animated tone, and slightly higher prices have been realized. At the moment holders are firm in their quotations, and during the week buyers have been more numerous. The opening price on Monday for cash parcels was £61 to £61 5s., and business was done on Tuesday from £61 5s. to £61 10s. Gobs, at which the market remained steady throughout Wednesday, while yesterday nothing under £61 10s. was offering, at which figure sellers remained, and the market closes to-day at £61 5s. The *bona fide* demand for manufactured, however, has slightly fallen away, and is not likely to revive again yet awhile unless some inducement be made in the way of cheap prices, as the Indian markets, to which the chief exports are made, have already been largely supplied, and the unfavourable exchange prevents many orders from being placed by Indian merchants. There has consequently not been a proportionate advance in the price of manufactured, and sellers have remained easy in their quotations. Should the charters from Chili, which will be announced next week, be anything unusual, they will probably influence prices; but the imports of Australian copper lately made may tend to swell the stock unless the deliveries for the month have been fully up to the average. The bi-monthly returns for the first half of the month showed them to be rather in excess of those for the previous few weeks, and it now only remains to be seen whether they have continued satisfactory during the latter half of the month.

**IRON.**—This market remains unchanged, prices being steadily maintained, owing to a continuance of a fair demand for all descriptions. Speculative business appears to centre very largely upon pigs, and this

gives tone to the market and enables sellers to uphold their quotations in spite of the unfavourable influences referred to in our last—viz., the very heavy and constantly increasing stocks in both Glasgow and Middlesbrough. The manufactured trade on the whole keeps dull; nevertheless, on account of a few large American orders having been placed with some of the works, previous rates are firmly held, and as the prospects are considered satisfactory no material change seems likely to be effected in quotations for some little time hence; in fact, should speculation carry the price of the raw material to higher figures, better prices will also probably be realized for finished iron, although the demand may not be sufficient to justify any rise. It appears that the few orders just lately received from America combined with a slightly better inquiry for home consumption are the only features to which the improved feeling can be reasonably attributed, and so far nothing has transpired to warrant the idea that the demand from other channels will increase to such an extent as to barely justify even the maintenance of current rates, much less any further advance. Take for instance India, there is an unfavourable exchange, and the limited dealings which from day to day take place for that market is an indication that indentors have no intention of placing orders for quantities above immediate requirements at the present range of prices, and especially while the statistical position of the metal remains so exceptionally unfavourable. In several instances present prices are said to leave a very fair margin of profit to the producer and manufacturer, and while this continues to be the case there is not likely to be any great curtailment in production, for while the makers can reap a fair profit for their output by selling to speculators, they are likely to continue to do so, although the *bona fide* demand may not be sufficiently good to justify existing rates, but the vast and constant increase in the stocks will doubtless hereafter tend to depreciate prices unless some extraordinary demand occurs which at the moment does not appear at all probable. It is, however, no use for merely a few producers to limit their supplies, for by so doing they would lose their own market and make but a slight impression upon stocks, but it requires a reduction in the supplies generally to give the necessary relief. Steadiness this week has again characterized the Glasgow Warrant Market, and the opening price on Monday was 52s. 6d. receding to 52s. 3d., and opened dull at this figure on Tuesday, but afterwards buyers became more eager to purchase, and market closed at 52s. 8d. buyers, while on Wednesday business was done chiefly betwixt 52s. 7½d. and 53s. Yesterday the market was steady at 52s. 3d. to 52s. 4d. The foreign and coastwise shipments last week were not so good, amounting only to 7951 tons against 8791 tons for the same week last year, and the total shipments from Christmas to date this year have been 610,109 tons against 521,106 tons for the similar period of 1879.

The number of furnaces now in blast has been increased to 120, and the stock on the 13th inst. was 479,590 tons. The imports of Middlesbrough pig iron into Grangemouth last week were 7610 tons against 6147 tons for the same week last year, and which makes the total increase for the whole of this year upon 1879, 1659 tons. The Middlesbrough market is reported steady, and prices have undergone little or no change. The general quotation for No. 3 is 40s., and for No. 1 is 38s. per ton less, for sharp delivery, and 41s. for delivery early next year. In a few instances buyers have effected purchases on somewhat more advantageous terms, but business has been chiefly carried through upon the quoted terms. Holders of warrants do not appear very ready sellers, and quotations generally rule at 41s. 3d. to 41s. 6d. for No. 3. The production still keeps far in excess of requirements, and the quantity held by Messrs. Connal and Co. last Tuesday was 115,454 tons, or an increase of 1468 tons for the week. Exports of both pigs and manufactured last week were less satisfactory, the former amounting to about 17,000 tons, and the latter of 1686 tons only. There is scarcely any alteration to be recorded in the position of the finished iron trade, but the prospects are still considered satisfactory, and some of the mills are said to have plenty of work in hand, especially those for rails. Plates are in good demand, chiefly by shipbuilders, and are selling chiefly at 67 15s., although 2s. 6d. per ton less has, in one or two instances, been accepted. Angles are quoted at 57 15s., and bars at 57 12s. 6d. to 57 15s. The Wolverhampton report shows the trade to be rather less animated, but prices continue strong. Sheets are firmly held at 71 10s. for singles, usual difference being asked for doubles and lattens, and somewhat higher rates are demanded for forward delivery. Scrap iron has advanced 7s. 6d., and one extra furnace has been blown in. There seems now no doubt that a general improvement has been effected in the trade at Birmingham, still the expansion is not so rapid as many anticipated, and there are only a very few of the mills who are actively engaged. Prices on the whole are firm, and cinder pigs are selling chiefly from 37s. 6d. to 42s. 6d.; part mine at 52s. 6d., and hot blast at 75s.; while 20s. per ton more is asked for cold blast. Two more furnaces have been relit, so there appears no probability of any reduction in the output. As regards finished iron, there is a better inquiry for the commoner qualities than for marked iron, and with a good demand for general merchant iron prices are said to be hardening. There is no change to be reported from Sheffield. Several of the leading firms continue busily occupied with the orders in hand, especially those for shipbuilding and railway material, and prices are upheld. From the Welsh districts there is no new feature to report, nevertheless a better feeling is said to prevail, although there is no increase in the amount of business being transacted, and as there is a good output of rails, and no apparent symptoms of a reduction in orders, the tone remains cheerful.

**TIN.**—During the week this market on the whole has remained tolerably steady, and business in spot parcels of Australian and Straits has been carried through chiefly from 92½ to 93½ cash. Advices from Holland and Penang are satisfactory, and report higher prices, while the deliveries here are said to be very good, and it seems generally expected that higher prices will in all probability rule ere long. The present pause in the upward movement is not taken as an indication that the market has attained its highest, but rather on account of present rates leaving such a good return to holders, who appear desirous of taking their profits. As statistics keep satisfactory, consumers would probably do well to avail themselves in the pause of the market ere renewed activity in the demand sets in, and as soon as the Banca sale next week is over, prices here will probably advance.

**LEAD.**—A moderate business is being transacted in this metal, and prices remain steady. Orders from China have lately been more numerous, which has given a firmer tone to the market.

**SPELTER.**—There is very little doing, and notwithstanding the continuance of cheap prices the demand remains slack. Quotations for foreign are rather lower, but those for English remain nominally unaltered.

**STEEL.**—This market is quiet, nevertheless a few of the rail-mills are fairly occupied, and quotations remain without change.

**TIN-PLATES.**—Prices continue steady, but the demand on the whole is not particularly brisk, although manufacturers report having received one or two fair orders.

**QUICKSILVER.** has receded in consequence of a concurrent desire of importers and second-hand holders to effect sales. Many speculators are beginning to perceive what we have on more than one occasion pointed out—that the position of the article is very unfavourable—and would gladly realize their stocks, but the demand for consumption and export is inadequate to absorb the quantities on offer. Meanwhile, the production in California is increasing, and the market there is weak. The official quotation is 67 10s., and transactions from second-hands are reported at irregular prices.

The MINING SHARE MARKET continues in a depressed condition, though metals are firmer than they were. In some cases, also, quotations are higher, but without much actual business having been transacted; while, on the whole, prices are merely nominal, and offer no real test of what could be obtained for them on a pressure of sales.

**TIN.**—The standards for ore have advanced this week 2½ per ton, and although shares are firmer, not much business has been transacted. Carn Breas have advanced to 97½, 102½, chiefly, it is said, owing to a proposition to sub-divide the shares. The mine has also improved. Dolcoaths are quoted 55 to 57; Cook's Kitchen, 10 to 11; Tincroft, 18½ to 19½; Blue Hills, 3½ to 4; South Frances, 11 to 12. The amalgamation scheme, we hear, has been abandoned, and South Frances will have to provide for its own necessities. North Busy, 2½ to 2½; at the meeting the accounts showed a profit of 47½ in four months' working, and the prospects of the mine are considered very favourable.

Botallack, 16 to 17; at the meeting in Cornwall the accounts showed a profit of 3000. on three months' working, and the debit balance has been reduced to 1172½. East Lovell, 30s. to 35s.; East Pool, 36 to 38; a dividend of about 1½ per share is expected on Monday next. Polrose, 1½ to 2; South Condurrow, 11 to 11½; West Basset, 15½ to 17½; West Frances, 11 to 12; West Peavor, 16½ to 17½; Wheal Bassett, 5½ to 6; Wheal Grenville, 10 to 10½; Wheal Jane, 8 to 8½; Wheal Jewell, 3 to 3½; Wheal Kitty (St. Agnes), 4½ to 5; Wheal Peavor, 28½ to 29½. West Kitty, 2½ to 2½; at the meeting on

Thursday a call of 2s. per share was made. The accounts showed the sales, 2567. 2s. 2d., and a cash balance in hand of 3047. 7s. 10d. A good quantity of ore ground has been laid open at the 72. New Kitty, 1½ to 1½; Wheal Coates United, 30s. to 35s. The levels here are improving and the sale of ore this month realised 3437. 11s. 6d. West Godolphin, 2 to 2½; West Phoenix, 1½ to 2½; Wheal Uny, 3½ to 4½; New Peavor, 2 to 2½.

**COPPER** is firmer, but with the exception of one or two mines there is very little doing in shares. Devon Great Consols, 12½ to 13½; the directors have declared a dividend of 6s. per share. Wheal Crebor, 4½ to 5; the points in operation in the aggregate are valued at 335½ per fathom. The sampling is 460 tons of copper ore. West Tolgus, 50 to 55; the sampling here is 250 tons. Devon United, 2½ to 2½; Bedford United, 17s. 6d. to 20s.; East Caradon, 2 to 2½; East Crebor, 15s. to 20s.; Gawton, 20s. to 25s.; Gunnislake (Clitters), 3½ to 4; Hingston Down, 20s. to 25s.; Mellanear, 4½ to 5; Marke Valley, 1½ to 2. Mona, 15 to 15½; the 70 east is said to be in solid ore for the width of the fore-breast. The 50 east has also developed a bed of ore which is daily increasing in thickness. Morfa Du, 17s. 6d. to 22s. 6d.; New Cook's Kitchen, 7 to 7½; North Penstruthal, 1½ to 1½. Parys Copper have become in good demand at 21s. to 23s. Prince of Wales is also in demand at 15s. to 20s. West Caradon, 1½ to 2; West Devon, 25s. to 30s.; West Seton, 17 to 18; West Gunnislake (Clitters), 20s. to 25s.

**LEAD** mines have been very quiet, with a lower tendency generally. Vans are weaker at 15 to 17; the bottom levels continue to improve, and opening out in good ore. Roman Gravels, 9½ to 9½; the sale of lead ore this week, 225 tons, realised 23167. 17s. 6d. East Roman Gravels, 17s. 6d. to 20s.; the mine continues to look well. The monthly sale of 40 tons of lead ore sold this week at 107 5s. per ton, against 107 2s. 6d. last month. Northern, 20s. to 22s. 6d.; the sale this week was 24 tons, at 97 9s. per ton, an advance of 9s. over last month. South Darren, 2½ to 2½; the mine improves. Pandora, 20s. to 22s. 6d.; the sampling is 25 tons of lead and 25 tons of blende. Derwent, 2 to 2½; East Van, 1½ to 2½; Glenroy, 10s. to 15s.; Leadhills, 2½ to 2½; North Herodfoot, 11s. to 13s.; Herodfoot, 15s. to 20s.; Tankerville Consols, ½ to ½ prem. Belvel United, 2½ to 2½; improvement is looked for in the 100 fm. level. D'Esresby Mountain, 40 to 50. North D'Esresby, 1 to 1½; the lode in No. 2 adit maintains its value; it is 5 ft. wide, and of a favourable character.

Gwyn-y-Mynydd, 3 to 3½; no change reported from Deborah, but the agent considers the ground precisely similar to that found at Fawnog, close to a solid course of ore. Pateley Bridge, 5s. to 10s. Great Holway, 4 to 5; the 60, east of level shaft, is valued at 3 tons of lead per fathom. Gorsedd and Merilyn, 2½ to 3; the 70 cross-cut is now close to the east and west vein, which proved so productive in the upper levels. Frongoch, 4 to 4½; this mine has sampled 100 tons of blende. West Lisburne, 1 to 1½; Pennant, 3 to 3½; Parys Orsedd, 1 to 1½; West Holway, 1½ to 1½; Grogwinion, 3 to 3½; Hartington, 1 to 1½; Mawston, 1 to 1½; Red Rock, 1½ to 2; Wye Valley, 1½ to 2½; New Wye Valley, 1½ to 1½; Ystwith, 1 to 1½; Bodirris, 1 to 1½.

**FOREIGN MINES.**—Blue Tent, 1½ to 2; Birdseye Creek, 1½ to 2; Placerville, 2½ to 2½; Canadian Copper, 1½ to 1½; Brazilian Gold, 1½ to 1½. Advices just received state that at each of the points reached in the three rock mines—Desuberto, The Matta Matta, and Servicio Velho—gold has been met with; as it has also in the crushed workings of the Jacotinga. Devala-Moyar, 2½ to 3½; Indian Glenrock, 1½ to 1½; Indian Phoenix, 1-16 to 3-16 prem. South Indian, 2 to 2½; Kapanga, 2 to 2½. Good progress is being made in sinking the shaft below the 50 fm. level, and this work is pressed forward with all speed.

English-Australian, 15s. to 20s.; advices have been received that the new drawing-engine is now at work, and that crushing had commenced. In the eight days before the mail left they had passed 330 tons of stone through the mill, but the gold produced was not stated, as the clean-up would not be made till the end of the month. The crushing of 1000 tons per month would give a large profit. Cape Copper, 40½ to 41½; Chontales, 5s. to 7s.; Colorado, 2½ to 3½; Copiapo, 11½ to 12; Don Pedro del Rey, 12s. 6d. to 15s.; Eberhard and Aurora, 2½ to 2½; Flagstaff, 1½ to 2; Frontino and Bolivia, 4 to 4½; Emma, 4 to 4½; New Quebrada, 6½ to 7½; Nouveau Monde, 20s. to 22s. 6d.; Panuncillo, 6½ to 6½; Pestarena, 5-16 to 7-16; Richmond, 15 to 15½; Ruby, 7 to 7½; St. John del Rey, 180 to 190.

The Market for Mine Shares on the Stock Exchange has fully maintained the activity noticed last week; prices are generally higher, and there is little or no difficulty in finding purchasers at quotations for the shares in any mine of ordinary reputation. Devon Great Consols has declared a dividend of 6s. per share for the quarter, making 32s. during the year, which represents nearly 14 per cent. to buyers at the present prices, which, after all, is the only reasonable way of calculating. The Wheal Peavor district is now becoming an important tin-producing district, and it is considered that those turning their attention to it will be well satisfied with the results. At Wheal Peavor they will declare a good dividend next month, and the prospects of West Peavor are regarded as exceptionally good. The position and prospects of both copper and tin being good, there is every confidence with regard to the mines producing those metals.

Indian Gold Mines have continued in great favour, and a large amount of business has been done, although there has been no material advance in prices. The new undertakings are readily obtaining the capital asked for. The South Wynaad Gold Mining Company announce that their list of applications will close on Wednesday next for London and on the day following for the country; and the Mysore Reefs have received so large a number of applications that the directors will meet early next week to settle the day for closing. The success of these newer enterprises is no doubt attributable to the satisfactory progress being made by those first started. The principal quotations are:—South Indian Gold, 2 to 2½; Indian Glenrock, 1½ to 1½; Devala-Moyar, 2½ to 2½; Devala Provident, ½ dis. to ½ prem. Indian Phoenix, 1-16 to 3-16 prem.; South-East Wynaad, 1½ to 2. It is only fair to state that the South Indian Gold Mine is the first to prove the value of its property at depth, one of the reefs having been tested 30 ft. below the outcrop, showing visible gold. The machinery ought to be delivered at the mines before the close of the year, and full confidence is felt that when in full work the result will be something extraordinary.

The Rasleigh Tin and Copper Mine (Limited) announce that since their prospectus was issued an extraordinary discovery has been made in the adjoining mine (New Eliza), where a lode of tin already 12 ft. wide is laid open, and the south wall not as yet reached. There are rocks of tinstone being blasted out 3 tons in weight, producing on an average the enormous quantity of 4 cwt. 3 qrs. 19 lbs. 0 oz. to the ton of tinstone.

The Clougan Mining Company, which was noticed last week as inviting applications for 5000 shares, have, it is said, received applications in excess of that number, and it is suggested that the directors had much better receive applications for the balance of shares at par, as it is evident that the public consider that risk seems little in taking a share in a capital of 30,000 for a home gold mine which has actually produced from shallow workings 12,400 ozs. of gold. It appears that 423 ft. have been already driven, leaving 452 ft. only to drive to reach the lode.

Devon Great Consols, 13½ to 13½ ex the quarterly dividend of 6s. per share declared on Wednesday; this is the fourth dividend paid this year, and will make altogether 32s. per share profit, or at the rate of 160 per cent. per annum. Considering the lower market prices for copper and copper ores during the last six or eight months, and the great outlay made as set forth in the directors' report presented to the meeting, the shareholders are to be congratulated on such a satisfactory statement as was then made by the Chairman and managing director, Mr. Peter Watson. A full account of the meeting will be found in another column. The attention of Cornish and Devon mine managers generally should be directed to a very important question brought forward at this meeting by Mr. Peter Watson as to selling Cornish and Devon copper ores at Swansea, and thus doing away with (what has been more than once characterized as a "farce") selling at Cornish ticketings, where there are now only three or four principal copper smelters purchasing ores. It appears that there is at present a strong feeling springing up amongst shareholders in Cornish and Devon copper mines to get the Cornish ticket-

ings done away with in order to obtain greater competition at Swansea, and with it, as is thought, greatly enhanced prices for the produce. There is also some talk of a new copper smelting company shortly starting with a large capital.

Devon Great United, 2½ to 2½, and in good demand since the meeting of shareholders on Wednesday, owing to the highly satisfactory progress which is now being made at the mine, and there appears to be a very general feeling that some important discoveries of copper ore and munda (arsenic) will be made at no very distant period. A full report of the meeting will be found in another column.

West Phoenix, 2 to 2½, and in demand owing to the highly favourable appearance and indications of shortly intersecting a rich tin lode in sinking the engine-shaft. Remembering what the adjoining Old Phoenix Mine has done in paying dividends some 150,000, to 200,000, it is considered probable that West Phoenix will shortly attract more attention than heretofore.

Mona, 1½ to 1½; the mine has been much improved of late. The 70 east is in solid ore for the width of the level, while other of the driftages have also improved preparations are making for the erection of another furnace to keep pace with the increased returns. The engine at Carna shaft is almost ready to start, and on the whole all matters are progressing satisfactorily.

"L'Esquerie du Simplon" forms the subject of an extraordinary letter addressed to the Procureur of the Republic with reference to the Simplon line, by Mr. J. David, and which fills the entire front page of Tuesday's Credit National. The letter states that the line is personified in an adventurer and a . . . who does not answer to his real name of Adrien Morillon, but prefers the false title of Count de la Valette, and declares that he would be arrested if he went to Switzerland, and that by judgment of April 7, 1874, confirmed by decree of July 2, 1875, of the Tribunal and Court of Turin, the La Valette Company forfeited the entire concession, and the caution money was confiscated. There is, moreover, no regular board of administration, since none could be appointed for more than three years, and the last general meeting, which (irregularly) nominated the last board, was held on March 28, 1876. Besides, three directors are necessary by the articles, yet, except one Charles Salomon, occupying furnished apartments at 50 frs. per month, in the Rue Rochechouart, and then in the Rue Cadet, there is no director except the said Adrien Morillon. If these be facts, it is essential that they should be known to English capitalists (who were said when the company was formed some 11 years since to have given it their support), because at the present time these old and worthless Simplon bonds are being offered on the Paris market, and will no doubt find their way to England, the nominal Paris quotation of which being used to get rid of them. The letter of Mr. J. David is one which the Procureur de la Republique cannot neglect; either he must prosecute Adrien Morillon and his associates for the protection of the public, or he must show that Mr. J. David's charges are unfounded, and thus silence him, for the protection of the Count de la Valette and his very honourable friends.

Kapanga Gold, ½ to ½; these shares are reported to have been in good demand, and some large transactions have quietly taken place during the week. It is said that some of the Indian gold mine investors are coming into this concern rather extensively. It will be satisfactory to the shareholders to observe the advertisement, which is published in another column, showing that the board of directors have decided to dispatch as quickly as possible rock-drills and air compressors for the purpose of more vigorously and expeditiously developing the resources of these extensive properties, for it should not be forgotten that the ground has produced, and is capable of producing when developed, quartz running as high as 5, 6, 7 and up to 10 ozs. or more per ton, as many of the neighbouring mines are now highly productive. The mail this week has brought news down to Oct. 9; at that date the shaft had been sunk 3½ fms. below the 50 ft. level; greater speed would have been obtained but for a hard bar of ground which had been encountered. Everything was proceeding satisfactorily. From the local papers we gather that mining affairs in the Comorand district, in which Kapanga is situated, had much improved; several of the new claims had struck gold, and many of the old ones are showing evident signs of improvement. One or two very rich strikes had been made, and the return of gold was increasing. One company had obtained 70 ozs. from 8 tons, another 51 ozs. from 10½ tons, and so on.

Copio, 11 to 12; the annual report recommends a further dividend of 5s. per share, making 10s. per share for the year. It is contemplated to divide each 20s. share (with 17s. paid) into 10 2s. shares (with 1s. 14s. paid).

Hornachos, 10 to 11; several of the driftages have further improved, and some important additional discoveries of rich silver-lodes are likely soon to take place.

La Plata Mining and Smelting, 1½ to 1½; the directors announce the fifteenth consecutive monthly dividend of \$15,000 out of the profits for the month of October, being at the rate of 9 per cent. per annum. The shares are reported to have been in demand in consequence of this announcement of dividend, and in anticipation of a formal quotation being obtained.

Richmond, 1½ to 1½; the usual telegram from the mines at Eureka, Nevada, states that the week's run was \$45,000, from 900 tons of ore. During the week the refinery produced doré bars to the value of \$50,000. The manager (Nov. 3) reports upon the various points of operation. The 800, south-east from shaft, on quartzite, has been drifted 4 ft. Work has been resumed on this drift, to explore on the east side to the compromise line, where we find some ore making down to the quartzite 40 ft. above the 800. The 900 west has been drifted 18 ft. in hard ground. The 900 north, on fissure, has been advanced 7 ft. without any change. The winze sinking below the 900 north is down a total depth of 18 ft.; the fissure is well defined and favourable for ore. The chambers are looking well; on the whole, they have improved since last week. No. 3 furnace was closed down on Tuesday for general repairs, and will start again this evening.

Ruby and Dunderberg, 7½ to 7½; continual progress is, it is stated, being exhibited in the quantity of ore raised. The report and telegram from the company's superintendent are considered satisfactory. The output this week shows an increase, and in advice just to hand from the company's mines it is stated that the ore returns are expected to be largely augmented, in order that the company's furnaces may be kept at good work. The company is assaying the ore as it comes to the furnace dump, and the quality reported to be fully equal, if not superior, to any hitherto raised. The alterations to the company's furnaces were, according to the last advices, nearly completed.

Flagstaff, 1½ to 2½; these shares are reported to have been actively dealt in during the week, and a considerable further and immediate rise is anticipated in consequence of the counsel's opinion obtained to-day that the old shareholders can legally become possessed of three shares in the new company by payment of 15s. in respect of each old share, instead of 12s., as heretofore contemplated. Active preparations are, it is understood, being made for bringing out the new company, in which powers are to be taken for acquiring certain adjoining interests included in the title of the American Mining Company—especially the claim of Mr. Bamberger, which that gentleman has, it is said, agreed to re-lease to the new company about to be brought out, and to take payment in shares of the same. It is added that Professor Vincent's syndicate for providing the purchase money seems to have been particularly well received, more than double the sum required having been offered him.

Mr. Pearson takes exception to the statement in last week's Journal that he had been replaced by Professor Vincent, and wishes it explained that the contract between the American Mining Company and Professor Vincent, whereby the former sells the property to the latter for 27,500, was effected by communication direct with Salt Lake City. Mr. Pearson believes, from brief telegram in reply received from Mr. McCormick, that 5000, deposit has been lodged by or on behalf of Messrs. Seligman, and that 60 days has been allowed for the payment of the balance.

Referring to an order recently made by the Master of the Rolls for compulsory liquidation, Messrs. Snell and Green have issued a circular dated Nov. 25 (it would be important to learn whether the amicable arrangement between Prof. Vincent and Mr. Bamberger referred to in the preceding paragraph was made before or after this circular was drafted), in which they state that such an order was, they think, inevitable in view of the disorganised condition and heavy indebtedness of the company, coupled with the fact that its mine has passed completely out of its possession, and that the efforts made by Mr. Pearson and Prof. Vincent for its reorganisation had not been successful. They remark that in their view it will be desirable that the new company to be formed should not be burdened with a heavy capital, by the issue of shares partly paid to share or debenture holders in the old company; indeed we have very grave doubts whether such shares could be issued without subjecting their holders to the liability of being called upon to pay the amount which may be credited to them thereon, and consider their interest best consulted by their having a preferential right of allotment in a company with a smaller capital (say) of 100,000, of which not less than 25,000 should be held as working capital, with a reserve of (say) 15,000, to provide for contingencies, and in which all the subscribing shareholders would be placed upon equal terms.

Missouri, 10½ to 11; advices from the mines, dated Nov. 9, report that since the last inst. the old engine-shaft has been drained to a depth of 180 ft., and timbered complete to a depth of 165 ft. At this depth we came to a level running north from the old engine-shaft a distance of 122 ft. to a shaft known as Air shaft, and used as such by the parties working the mine. This level had been carried regularly, and is 4 ft. by 6 ft. The back has been extensively stoped, and the workings show that the lode has been strong and very rich. Through this level the heaviest lead deposits were in large clear openings. We also found that a winze had been sunk in this level some 95 ft. north from engine-shaft.

On reaching the air shaft we found the level had been continued north from the air shaft 100 ft. Little stoping had been done, and there are places in the back that are very promising to drive. The lode in the level, and where it shows in the shaft, is as we expected to find it. The pumps and machinery in shaft were massive and costly, and we have taken out a number of tons of old castings and parts of the engine that were thrown down, which we shall ship to St. Louis, and sell as scrap-iron. In St. Clair Mine the ore ground remains much as stated in our letter of the 1st. The dressing machinery is being set as quickly as the work can be done. Telegram, Nov. 20: "Engine-shaft down 230 ft.; lode steadily increasing."

South Wheel Crebor, 1½ to 1½; these shares are reported to have been in demand during the past week in consequence of the recent discovery. The lode in the 16 is now worth 3½ tons of copper ore per fathom. The cutting of the east and west lode referred to by the agent at the shareholders' meeting, on Wednesday, is an interesting as well as an important point, and will place the mine in a considerably better position.

In Lead Mine Shares there has been a large amount done, consequently, it is said, upon the better price which the miners are receiving for their produce. In one instance the same quality ore is reported to have realised 9s. per ton more this month than last.

Tankerville Great Consols, ½ to ½ prem.; a fair amount of business has, it is reported, been done at these prices. The allotment letters went out this week, and it appears that non-Tankerville old holders got only about half what they applied for. Some important discoveries of lead ores are shortly expected from the intersection of side lodes, and vigorous operations are now being directed with this object.

Leadhills shares have been in good demand all the week at about 2½ to 2½, with an upward tendency. A good rise in the price of lead would of course materially affect this company, as was pointed out by the Chairman, Mr. Peter Watson, at the last half-yearly meeting.

Fronch, 4½ to 4½; this company has sampled 100 tons of blende for sale next week, and other parcels of blende and lead are preparing for market. The latest news from the mine is to the effect that everything is progressing as well as usual, and in several places important improvements have been taken place. A letter written from the mine last week by one of the principal shareholders states that it "is looking as well as ever everywhere, and in some places better"; the greatest difficulty now is in getting the great accumulations of ore away. A splendid run of ore has been cut at the 130 east, and the bottom level is also being driven in what is considered to be permanent ore-bearing ground.

Grogwinian, 1½ to 1½; the new shaft has been sunk from surface to the bottom level, and the new water-wheel is fixed and almost ready for use; and the mine, in the deep workings below the level of the river, is opening out in a very satisfactory manner.

New Wye Valley, 1½ to 1½; good reports continue to come to hand. The ground about the new shaft is yielding capital ore in the bottom level, and seems likely to further improve. It is intended to resume the sinking of this and Tippet's shafts, as the prospects of opening up very rich ground in depth are good. There are many points in the mine yielding ore in paying quantities, and the opinion of a practical expert who has recently visited it is to the effect that further good discoveries will be made by driving several cross-cuts at the 22, east of new shaft.

Red Rock, 1½ to 2; it is stated that there has of late been a very marked improvement in this mine, and that it is now looking better than it has done for many months past. It appears that in the 23 east, in the section of ground adjacent to the Fronch Mine, and in the same famous lode, a very important discovery of ore has been made, which is likely to prove of the greatest importance to the company. It is said that the lode is very rich in the end of the level driving towards Fronch, and beats anything ever seen in themine. A further parcel of lead has been sent to market, and others will quickly follow. Gwyn-y-Mynydd, 3 to 3½; the favourable channel of ground still continues at Deborah, both north and south, and the agent reports it from personal observation as a fac-simile of the ground which in Fawcett was found in close proximity to a course of solid ore 9 ft. thick.

Van, 16 to 16; the 120 west and the winze below the 105 still continue to open out good ore. No change elsewhere.

Pateley Bridge, 1½ to 1½; the driftages of the 30 towards the three veins has been resumed. Other points looking well.

[The closing quotations being given in the Share List on the last page of the Journal it is unnecessary to repeat them here.]

INSURANCE SHARES have, according to this evening's report of Mr. W. L. WEBB, of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance British and Foreign, 25½; Commercial Union, 24½ to 25½; Fire, 3½ to 4½; Imperial Fire, 150 to 152½; Indemnity, 106½; Liverpool and London, 20½; Lion, 24½ to 3½; London and Provincial, 4½ to 5; Marine, 91 to 91½; Merchants, 1½ to 1½; Railway Passengers, 7½; North British and Mercantile, 60½ to 61½; Rock, 8½; Ocean, 7½ to 7½; Sun, 450; Universal, 9½ to 9½. Insurances firm. For closing prices see list on last page of Journal.

GAS SHARES.—The principal business in these shares, according to this evening's report of Mr. W. L. WEBB, of the Stock Exchange and Finch-lane, has been in Bombay, 5½ to 6; British, 34; Continental Union, 21½ to 21½; ditto new, 24½ to 25½; European, 19½ to 19½; Gas, A, 179 to 184½; ditto, fifth issue, 17½ to 17½; ditto, H, 7 per cent., 135 to 137; ditto, C, 22½ to 22½; ditto, D, 222; ditto, E, 221½ to 222; Imperial Continental, 185 to 190½; London, 185 to 186½; Monte Video, 16½ to 16½; Oriental, 7½ to 7½; Para, 6½ to 6½; Metropolitan, B, 182 to 187; Malta and Mediterranean, 23½; Rio de Janeiro, 25½; San Paulo, 13. Gas stocks little doing, but steady. For closing prices see list on last page of Journal.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. W. L. WEBB, of Tokenhouse-yard, are given in tabular form in the last page of the Journal.

The London and Staffordshire Insurance Company notify that Mr. Thomas Short, director of the Birmingham Joint-Stock Bank, has joined the Board since the issue of the prospectus.

The Right Hon. George Selinger-Booth, M.P., late President of the Local Government Board, and Mr. Herbert Barnard, of the firm of Messrs. Dimsdale, Fowler, Barnard, and Dimsdale, have joined the Board of the Anglo-Egyptian Banking Company (Limited).

\* With this week's Journal a SUPPLEMENTAL SHEET is given, which contains: Original Correspondence; Colliery Explosions—Causes and Preventions; Important Seismological Observations (F. Maxwell Lytle); On Coke Making—No. IV.; The Future of Coal Mining in Yorkshire, Derbyshire, and Nottinghamshire (W. J. Thompson); Practical Education for Miners—No. III.; Slides and Heaves; Theory and Practice—Another Problem (R. Knapp); the Emma Silver Mine; Gold in India; Gold Mining in the Dutch West Indies (A. M. Chumacero Ac.); the Phosphate Deposits in the West Indies—No. I.; the Mineral Resources of West Virginia (W. de Mulder); San Pedro (Chili) Copper Mining Company; Nouveau Monde Mining Company; Pesterana Gold Mine; the Panucllo Copper Company; Central Railroad Company of New Jersey; the Lead Trade; the Tin Trade (H. Tiedeman); Boring Machinery in Cornwall (Hathorn and Co.); Dolcoath and Tincroft (Percy Payne); Tin Mining Extraordinary in Cornwall; Tin Mining—New Eliza and District (T. Vosper); Devon Friendship Mining Company; and Devon Great Consols (H. W. Lamb); Devon Friendship Mine (C. Thomas); Leadhills; Wheal Hony and Trelawny United Mines; the Moray Firth Mining Company (A. Francis); Llanrwst Mining Company; Cornish Mining—the Unwrought Mineral Ground of Gwennap (C. Bawden); Lead Mining in Llanarmon; the West Mostyn Coal and Iron Company; Cambrian Mining Company (G. H. Keene); Ancient and Modern Mining Engineering; Abandoned Mines—Devon Consols Meeting; the Vincent Tin Mining Company—Trade of the Tyne and Wear—Reports from Cornwall, North Wales, Salep and Cardigan, North and South Staffordshire, and Derbyshire and Yorkshire—Provincial Stock and Share Markets—Scottish Share Market—Mining Echoes and Mining Matters—Investment Notes—the Electric Light for Collieries—Engineering Exhibition—Agricultural Hall—Illumination of Mines—Electric Lamps—Registration of New Companies—Foreign Mining and Metallurgy—Meetings of Devon Great Consols, Devon Great United, West-Kitty, Devon Bury, General Mining, South Wheel Crebor, Copio, Hungarian, Wheal Prussia and Cardew United, and Bedford Companies—Patent Matters, &c.

DEVON FRIENDSHIP.—The prospectus of this company has been most favourably received, and the applicants for shares are of a wealthy and influential class. The property is generally regarded as of unusual merit and importance, and possessing the elements of more substantial, earlier, and more certain success than a very large proportion of similar undertakings that are brought before the public. We would draw attention to the letter (in another column) of our esteemed practical correspondent, Capt. Chas. Thomas, of the well-known Cook's Kitchen Mine, with which he has been associated as an agent for upwards of 27 years. The opinions of so good an authority are very valuable. We also have a letter from that veteran of mining celebrities, Mr. Jehu Hitchins, which is of special interest. His brother Josiah is famous as the discoverer of the wonderful Devon Great Consols lode, but we are sure that he would willingly allow Jehu to share, on at least equal terms, the thorough practical experience of a lifetime, of the mineral features of the Tavistock district. Mr. Jehu Hitchins writes:—"Nov., 1880.—With regard to my opinions and views of Wheal Friendship, permit me briefly to observe that I was brought up to mining in the Tavistock district, when I became well acquainted with the different mines within its range, as well as others more distant. Of the former category was the Wheal Friendship, decidedly the most extensive and profitable, and the first I ever went underground in; my father, whom I assisted for many years, being mineral agent to the landlords, Mr. John Buller, of Marval, and his brother, the Rev. Rd. Buller. For years I frequently examined the mine, and therefore know the very rich and productive nature of the lodes in the old mine, for which I not only then but still do entertain a most favourable opinion; not only of extensions east and west thereon (in the

latter direction more especially), but also of the lodes parallel therewith, both north and south, if properly explored. Since these days one of these lodes (Bennett's) has verified my expectations to the extent of operations thereon, which may be regarded as only an earnest of what is to come. The foregoing refers only to the copper ores of former times, since which the tin, then overlooked, has been found to be in profitable quantity; and, what is of considerably greater importance, is the increased value of the arsenical munda, immense quantities of which are proved to be available in both the old mine as well as in Bennett's levels, which can be converted into crude or refined arsenic at a considerable profit, so as to enhance the value of this property to a very appreciable extent. Altogether, I regard this property as constituting a very promising field for mining operations on an extended scale; having, besides the promising prospects, the great advantage of the easy acquisition of labour from the neighbouring villages, and, above all, an ample supply of water power, of sufficient force, if well directed, to master all the requirements of both the old and Bennett's lode, to any depth they may attain for many years to come." Comment on these remarks would be superfluous, and we need only refer to the prospectus in our advertising columns for particulars as to the capital of the company, &c. The composition of the board of directors requires no recommendation.

OLD WHEEL ROSE.—This celebrated old mine near Helston is about to be reworked with vigour by the Lomax Company. Some special reports respecting it appear in our pages to-day, as also an appeal for capital in our advertising column. The mine is very highly spoken of.

#### CAPPER PASS AND SON, BRISTOL,

ARE BUYERS OF

LEAD ASHES SULPHATE OF LEAD, LEAD SLAGS, ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c and DROSS or ORES containing COPPER, LEAD, AND ANTIMONY.

#### HENRY NUTT AND CO.,

57, BRISTOL ROAD, BIRMINGHAM,

PURCHASERS OF

LEAD ASHES, LEAD SLAGS, SULPHATE OF LEAD, TIN ASHES, TERNE ASHES, AND ALL REFUSE CONTAINING TIN AND LEAD.

#### GEO. G. BLACKWELL,

26 CHAPEL STREET, LIVERPOOL,

PURCHASER OF

MANGANESE, ARSENIC, FLUOR-SPAR, WOLFRAM, BLENDE, CALAMINE, CARBONATE AND SULPHATE OF BARYTES, ANTIMONY ORE, CHROME ORE, MAGNESITE, EMERY STONE, PUMICE STONE, OCHRES AND UMBERS, CHINA CLAY, LEAD ORE FOR POTTERS, TALC, PHOSPHATE OF LIME, &c.

#### C. H. WALKER AND CO.,

MINING AGENTS AND ENGINEER, VALPARAISO AND SANTIAGO, CHILE.

#### HENRY WIGGIN AND CO.

(LATE EVANS AND ASKIN),

NICKEL AND COBALT REFINERS BIRMINGHAM.

#### ABBOTT,

TO CAPITALISTS AND INVESTORS.

#### PAGE,

ABBOTT, PAGE, AND CO., STOCK BROKERS.

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Stock and Share List now ready. Post Free on Application.

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PRACTICAL AND CONSULTING MINING ENGINEERS,

WEST OF ENGLAND

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ST. AUSTELL,

CORNWALL.

TO CAPITALISTS AND INVESTORS.

KENDALL AND CO. having had over 30 Years' Practical Experience in MINING in all its various branches, and being daily associated with the various operations of Mines in Cornwall, are enabled to speak with authority as to the position and prospects of Mines. Their advice will be found most valuable, as well as to those who have already invested, and to intending investors. Particulars of Mining and other Shares which are certain to rise cent. per cent. in a short time on application. KENDALL AND CO.'S Special Circular should be read by all investors with thoughtful care.

#### TO COLLIERY PROPRIETORS, AND OTHERS.

WANTED AT ONCE, THE AGENCY for a GOOD HOUSE COAL. COLLIERY or COLLIERIES for South of England. Can guarantee sale of 200 tons weekly if terms are suitable. Address, "K. 34," O. H. May and Co., General Advertising Offices, 73, Gracechurch-street, London.

FOR SALE, A FIRST-CLASS SECOND-HAND 80 in. CORNISH PUMPING ENGINE, with several 11 ton BOILERS. Apply, Wm. BENNETTS, Roskear, Camborne.

#### HEMATITE IRON ORE MINE.

PARTNER (sleeping, or otherwise) WANTED, to TAKE PLACE OF ONE RETIRING. Full investigation permitted. Capital required about £1000. Ore well known in Wales and Staffordshire. Address, "Hematite," MINING JOURNAL Office, 26, Fleet-street, E.C.

THE FORTESCUPE MINES—THE NEW PENROSE TIN AND COPPER STANNAGWYN. These Mines are accounted by the best authorities to be among the richest in the United Kingdom. The Shares should be bought at present very low prices for a great rise. Full particulars from Messrs. PATRICK BARRY and Co., Stockbrokers, Mildmay Chambers, Union-court, Old Broad-street, London.

#### FOR SALE, THE WHOLE OR PART:—

50 South Devon United, £1 10s.	50 Gawton, £1.	100 West Caradon, £1 15s.
20 Devon Great United, £2 2s. 6d.	50 Parys Corportan, £1 1s.	20 Leadhills, £2 5s.
60 Marke Valley, £2.	20 So. Condurrow, £1 1s.	100 Lady Ashburton, £1.
	100 Wh. Coates Unit, £1 5s.	25 Lead Era.
	30 South Darren, £2 5s.	Wheal Grenville, £10.

WANTED TO BUY, East Crebors at 15s., and Wheal Crebors at 24 10s. Address, H. WILKINS and Co., 1, Tanworth Villas, Tottenham.

MR. THOMAS THOMPSON, JUN., STOCK BROKER, 16, ST. SWITHIN'S LANE, E.C. Mr. THOMPSON transacts business in every species of Stock Exchange and Mining Securities.

Mr. THOMPSON affords reliable information to investors, and can give, when desired, a list of first-class Stocks and Shares, yielding 4 to 10 per cent. dividends upon present prices. Mr. THOMPSON'S weekly Circular may be had on application.

MR. W. TREGELLAS, 40, BISHOPSGATE STREET WITHIN, E.C. Deals in all descriptions of STOCKS AND SHARES at close market prices, and is always in a position to do business in SANTA BARBARA, PITANGUL, and BRAZILIAN GOLD MINES.

## ANGLO-AMERICAN MINING.

**RICO SILVER MINING COMPANY OF COLORADO** (LIMITED LIABILITY), CHICAGO, U.S., carefully managed at small expense. Profits of 100 per cent. per annum are expected, much more may be realised. The property of the company is at Rico, on the Rio Dolores, in South-Western Colorado—a district containing the richest and most easily worked silver and gold mines in the world. The company offer working capital shares, fully paid, on extremely favourable terms to the investor. For prospectus and information, write to J. J. West, 245, Wabash Avenue, Chicago, U.S.

## MONEY AND MINING.

**IT IS WELL TO LOOK BEFORE YOU LEAP.** Anyone who thinks of putting money into Mining can, by writing to me, have sent post free to his address, a CIRCULAR, which will give him Valuable Information, Points of Financial Utility, and Practical Views regarding Mining Investments generally, considered from a business standpoint.

J. J. WEST, 245, WABASH AVENUE, CHICAGO, U.S.

## Notices to Correspondents.

\*. Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt; it then forms an accumulating useful work of reference.

**MIXED LEAD AND ZINC ORES**—"H. C." (Turo).—The proposition to treat the mixed ores so as to produce an alloy direct is not new, but there is still room for a process which will do it successfully. One of the last suggestions was to volatilise as much as possible, and use the sublimate and flue dust as a pigment just as it is scraped up; the remainder of the lead being reduced in the usual way. It was said that the bad colour of the pigment was the sole objection to it, and that the process as a whole could be carried on at a profit, where the lead and zinc could not be separated in the ore by dressing.

**RATE OF WINDING**—"Enquirer" (Mons).—The speed varies considerably in different English collieries; from 20 miles to 30 miles an hour is an ordinary rate. At Rosebridge, Wigan, four tubs, or 23 cwt., of coal are drawn from a depth of 2413 ft. in 50 seconds, which considering the reduced speed at starting and stopping would give fully 35 miles per hour for part of the journey. There is no unpleasant sensation in descending Rosebridge at this rate. At Dukinfield they take 1½ minute to raise a similar weight only 2034 ft., which is less than 15½ miles an hour.

**COMPRESSED AIR**—"M. R." (Huelva).—It is, of course, not impossible that wind-power could be employed for compressing air to be used for working rock-drills in mines, but as to whether it would be economic or otherwise would depend upon so many circumstances that it would be impossible to answer the question off-hand. Where the utilisation of wind-power is popular very good results are frequently obtained, but where the users are predisposed in favour of steam they expect so much from wind that they are usually disappointed. Any of the compressors advertised in the Journal could be adapted to work with wind-power if necessary. When fuel is obtainable at reasonable cost steam is, of course, preferable.

**Received**—"F. H." (Colorado): Yes—"G. F. A.": We could not devote space for so long a paper: it should be published as a pamphlet—"Constant Reader" (Bristol): We will endeavour to do so. If you can assist us, do—"C. M. W.": The depth of the Monkwearmouth Colliery, near Sunderland, is 1736 ft. See an article in this week's Journal, in which many other particulars than those required are given—"M. G. S."—"O. M."—"D. A. L."—"E. J. S." (Killifreth): See a report from the mine in another column. Can any correspondent give some details as to the prospects of future working—"T. W. G."—"J. J. W." (Chicago): Next week—"Bourbonite": The Canadian Mining Notes shall appear next week—"W. B." (Aberdaunt):—"C. E. W." (Telegram):—"Viator" (North Wales Slate Quarrying):—"Traveller" (Mining in Cardigan).

## THE MINING JOURNAL,

## Railway and Commercial Gazette.

LONDON, NOVEMBER 27, 1880.

## MECHANICAL VENTILATION OF MINES.

During the last three or four years nothing in connection with mining operations has made such progress as mechanical ventilation, which is undoubtedly the best that can be adopted. The fan has been known for many years, but it has now been brought to a high state of efficiency in a comparatively short time. So long as minerals were worked at a short distance from the surface ventilation was an easy matter, for the works were in communication with the outer air either by pits or horizontal galleries opening into the atmosphere either at the same or different levels, the current of air being obliged to circulate in the mine, sometimes ascending and sometimes descending according to circumstances. But where mines have been sunk to considerable depths from the surface, and with far more extended areas, the altered condition of working, as well as the greatly augmented production of dangerous and explosive gases, has necessitated the adoption of various systems of ventilation. In coal mines up to a comparatively recent date the furnace has been almost generally adopted. The temperature of a furnace, however, is exceedingly variable, and so also is the ventilation, but in a less degree. The amount of ventilation produced by a well constructed furnace varies in practice from 4000 to 8000 cubic feet per minute for each foot in breadth of the bars. The bars are usually about 6 feet from front to back, whilst the furnace is usually placed some 30 or 40 yards from the shaft, so that the currents of air of different temperatures are more uniformly mixed before entering the up-cast. But there is some danger incurred by the furnace, for when the air returning from a mine is extensively mixed with gas nearly up to the explosive point it flashes off in long flakes as it passes over the fire, and may ignite, and so do serious injury, especially where there is not a dumb drift to the shaft, which is usually put about 20 yards above the furnace. A practical limit is soon reached in the application of almost any ventilating power, but soonest in the case of the furnace, in consequence of the high temperature and the small exhaustion (not exceeding in any mine 13 lbs. on the square foot) which it affords. Mechanical ventilation, however, offers superior advantages to the furnace or any other known system, as it afforded the managers of mines the means of increasing the ventilation at pleasure, and thereby be prepared to meet any emergency that might arise, so that an amount of air could now be sent through the workings of a mine that would have been considered impossible 20 or 30 years ago.

Mine owners, it may be said, have fully appreciated the introduction of mechanical applications of late years for giving increased safety to those they employ, and this is fully shown by the great extent to which the primary principle of furnace or driftway ventilation has been superseded by the more effective and elaborate construction of the fan. Mechanical ventilators simply have long been known, in the shape of pumps, screws, pneumatic wheels, and fans, and a rather peculiar machine was put down many years ago at the Mairhals Colliery, near Seraing. It consisted of two iron tubs, or aerometers, each 11 ft. 6 ins. in diameter, suspended from a beam, allowing of a 5 ft. stroke. The velocity of each aerometer was 125 lineal feet per minute, and 11,500 cubic feet of air was exhausted at a drag of 6½ lbs. to the square foot. At the Hepburn Colliery, many years ago, Mr. Buddle put down a double-acting air-pump, when the discharge of gas was such that it was considered dangerous to have the furnace going. The cylinder was 8 ft. and 5 ft. square, and the piston made 80 strokes 6 ft. in length per minute. In Belgium Fabrys and Lemeille's ventilators were first introduced, and the former obtained a prize medal in the Great Exhibition of 1851. It consisted of two wheels on parallel axes revolving in a case in opposite directions by means of external tooth wheels. The teeth of each axle drove the air, but the contact in the centre arising from their peculiar shape prevented the air from returning. One of the machines, of which each cog or tooth was 6 ft. 6 ins. in length, and 5 ft. 7 ins. in its projection from the centre, was propelled by an engine with 12-in. cylinder and 2 ft. stroke, with the steam at 41 lbs. The number of strokes was 48, and the quantity of air exhausted 24,400 cubic feet per minute at a resistance of 9½ lbs. per square foot.

Those machines, unlike other ventilators, have been more frequently used for forcing the air through mines than in exhausting it. Another machine of a similar character, but perhaps more simple,

was invented by a Mr. JONES, of Birmingham, there being more perfect contact with the pistons. It has been extensively used by gas companies in pumping gas through the purifiers, producing a large amount of exhaustion. The common straight-vaned fan, with the air entering on each side, similar to LETORET'S, has been put down at several places. HERBERGER'S fan was just known about 40 years ago. Each alternate vein being shorter than the other there was not much throttling of the air, and the ingress of the latter was prevented by a sheet-iron ring dipping into the water. Many years ago a fan was put down at Earl FITZWILLIAM'S colliery at Elsecar, in the West Riding, by Mr. BIRAM, the inventor of the anemometer which bears his name, and is still at work, and though the seam is a fiery one the gas is thoroughly diluted. LEMEILLE'S fan is not much known in this country, though it is in France, some of them being at work in the Aniche Mines. At the Renaissance Pit, in connection with the mines named, there is a small Lemeille 14 ft. in diameter, 12 ft. high, giving 22,000 cubic ft. of air per minute at 15 or 16 revolutions a minute. A considerable number of fans are now to be found in most of our mining districts, and they are fast being adopted at places where the furnace system has been in use, whilst as a rule they are being placed in new mines, for capitalists find it most economical to take advantage of the most advanced results of mechanical and scientific experience, and the encouragement given to inventors has led to more zeal and ability being attracted to the mining industries of the country than was formerly the case, so that the theory and practice of ventilation are now studied to a greater extent than ever. The Guibal fans, introduced to this country from France and Belgium, are now well known, for they are to be seen at work in many mining districts. In France, at the Anzin and other mines, they are generally 30 ft. in diameter, but they can be produced to give as much air as could be desired at any place. We have seen them at work at several places, and the managers are unanimous in testifying to their value. In mines giving off a good deal of gas they are far preferable to the furnace, from the vast quantity of air that can be forced into all the workings, no matter how extensive they may be.

The Schiele Fan, manufactured by the Union Engineering Company, of Manchester, of which Mr. PENMAN is the chief, is well known as a most excellent one, and, at the same time, a most economical one, seeing that there is no large and costly masonry work required, which is a most important consideration. In mines giving off a good deal of gas, or liable to sudden outbursts, the Schiele fan has been found most effectual. We recently saw one at work at the Corton Wood Colliery, near Barnsley, and a more effective ventilator could not be desired. Some of the daily records show that from 140,000 to 150,000 cubic feet of air passed through the mine daily. The value of the fan was shown on the occasion of a sudden outburst of gas which took place in the dip slants. The volume of wind passing through at the time was not less than 220,000 cubic feet per minute, the fan being put to a very high velocity. Although the atmosphere was highly impregnated with gas, and all the lamps put out, yet no one was injured. The workpeople made to the main engine slant, and worked their way to the pit edge against the fresh air, so that no casualty occurred. That such a vast quantity of air as that named can be sent through the workings of a mine shows the value of the fan stronger than any eulogy of ours can do. Small fans are also made for temporary purposes, and we recollect in one instance that one was lent by a mineowner on the occasion of a serious and fatal explosion. The importance of mechanical ventilation we believe will be more fully acknowledged than it has yet been and it is for that purpose that we have drawn attention to the subject.

## MUTUAL INSURANCE OF MINERS.

The proposals made by mineowners in several districts to make contracts against the provisions of the Employers' Liability Act have not been so far successful, and it is not unlikely that an understanding on the subject will be come by most of the mining associations. The principle of insurance, to which the employers should subscribe as well as the men, has everything to recommend it, as it would insure compensation for injuries, and at the same time avoid litigation, so carrying out the spirit and intention of the Act. But the miners' leaders, in several of the largest and most important districts, are opposing the proposal with the greatest energy. It would appear that the leaders do not like the idea of the employers being connected in any way with their funds. By keeping their money as at present they will have a larger sum than previously with which to fight the mine owners, and to support those who may be on strike. In the case of a serious accident, involving loss of life, it is presumed by the leaders that the masters will be found liable, so that no money will be taken from the funds for the support of injured persons or widows and children. Those associations, like that of Durham, having a large accumulated fund, it is evident, will not contract themselves out of the Act even on the very liberal terms proposed; whilst in some few districts, where combination is not strong, or where there is no association, they may agree to the mutual insurance principle, but these will, in all probability, first see what is done in the great centres where unionism is strong.

Mr. MACDONALD, M.P., has already cautioned the Scotch miners to have nothing to do with proposals which might be made to induce them to contract themselves out of what he terms the advantages of the Employers' Liability Act, and there is no reason to suppose otherwise than that his advice will be adopted by those who have hitherto carried out his behests as becomes those who have installed him as their leader. Circulars have also been issued to the miners of the United Kingdom signed by Mr. MACDONALD, M.P., Mr. BURT, M.P., and the executive of the Miners' National Association, dealing with the Liability Bill, and, whilst strongly approving of it in every part, the workmen are advised not to contract themselves out of the Act by mutual insurance. Mr. CRAWFORD, of Durham, the chief of the most prosperous association in the kingdom, has also issued a circular in opposition to the principle of insurance. It is, therefore, apparent that the opposition to the proposal for insurance is not only strong at present, but is likely to grow in intensity, and that in those districts where the scheme has met with something approaching approval the men may ultimately be induced to follow the course marked out by the leading men amongst the mining body. In South Wales some of the men have shown an inclination to meet their employers by consenting to insurance, but at present not much reliance can be placed on them, for it is not so long since they declined to form a permanent benefit fund for the relief of miners suffering from injuries or sickness. The Marquis of BUTE has offered to subscribe 2000*l.* a-year for five years towards the proposed South Wales insurance fund, but it is questionable whether the men will come to an agreement after having read and digested the circular issued by the executive of the Miners National Association. In the West Riding of Yorkshire, where there is a good permanent benefit mining fund, in no way connected with trade matters, the question of insurance has not as yet been brought formally before the men. We have it, however, on the authority of Mr. FERTH, the Secretary of the South Yorkshire Miners' Association, that the mutual insurance scheme would not be accepted. The miners of Lancashire and Cheshire appear to be rather in favour of the proposal of the employers, and Mr. W. PICKARD, one of the agents, at a meeting a few days since advised the colliers, instead of flinging away their money in litigation, to support a proposal that the masters should make a larger contribution to the permanent fund, so as to meet claims contemplated by the Employers' Liability Act. But it is not unlikely that the men will be considerably influenced by the circular of the National Association.

At the meeting alluded to an important statement was made by Mr. PICKARD. He said that the Solicitor-General had informed him that the masters, under the new Act, could not be held responsible for the act of a contractor, and therefore a drawer who was injured at his work would have to sue the collier and not the owner of the mine. If this is correct, and there is no room for doubting it, a great responsibility will be taken off the shoulders of mineowners, for in coal mines the getter, or collier, engages his harrier, paying him daily wages. It will also show to those employers whose men refuse to adopt the principle of mutual insurance a mode by which they can contract themselves out of the provisions of the Act. They could let

a great deal of the work underground by contract, so that one man could employ several others, and thus being a contractor he would remove all responsibility from the owner. This would suit employers even better than insurance, but in the interests of the men and their families we should like to see the liberal offer of the mineowners in several districts accepted, and that in a kindly spirit.

## CANADIAN PACIFIC RAILWAY.

Attention is now more than ever directed to the Canadian Pacific Railway. For many years this great undertaking has been a kind of counter in the hands of Canadian politicians, and has been used by them in the game of Canadian politics. At last the matter appears to have been taken in hand in something like sober earnest. Canadian capitalists, English capitalists, and French capitalists are all clubbing their resources, and bringing their energies to bear upon the completion of the long desired line. There is nothing unreasonable after all in this. Money is becoming so cheap in England that we really ought to be thankful to Sir JOHN A. MACDONALD for diverting some of our spare cash into this great Canadian scheme, as well as to M. FERDINAND DE LESSEPS for beguiling us to embark in another monster canal. Canada, too, is after all a child of France, and it is but natural that French capitalists should take an interest in New France, and should be willing, at any rate, to embark money in this great Canadian railway scheme, more especially if they can get a good swinging in return upon their investment. It is certainly again not surprising to find Canadian capitalists willing to help forward an important Canadian work.

Some of the politicians and financiers who are pushing forward this vast Canadian railway scheme affect to believe that it will create a new Canada. There can be no doubt that the Canadian Pacific Railway will be a powerful means of opening out the immense North-West. If anything can assist the colonisation and settlement of that enormous region it must be the Canadian Pacific Railway. We are told to expect great things of Manitoba and the North-West, and certainly, so far as space is concerned, this region can accommodate a population of several hundred millions; but the serious question to be determined is whether the North-West is exempt from the climatic difficulties which have hitherto certainly proved a serious stumbling-block in the way of the general development of Canada. We are told that climatic apprehensions with regard to the North-West have been greatly exaggerated; in fact, if we are to believe all we read and hear on the subject the North-West is a kind of paradise, which only requires the Canadian Pacific Railway to become the home of countless millions. We can only trust that the hopes which have been conceived with regard to the North-West may be, at any rate, partially realised. If the Canadian Pacific Railway really develops a new Canada so much the better.

The Canadian Government, at any rate, appears to have faith in the Canadian Pacific scheme. It has already expended about \$30,000,000 in surveys and works, and it is ready to give the parties who are disposed to take the affair in hand the benefit of all this outlay. It will further give them a cash subsidy of \$25,000,000, and a land grant of \$25,000,000 acres. It is believed that this land will realise at least \$2 per acre, so that the whole assistance which the Canadian Government is prepared to extend in aid of the project is \$105,000,000. It is proposed that the line should be completed in ten years from Lake Nipissing, its eastern terminus, to Buzzard Inlet, on the Pacific Coast. It is hoped that what is termed the prairie section, extending from Manitoba to the Rocky Mountains, will be ready for traffic by 1884. Altogether there is certainly more life and vigour about the Canadian Pacific at the present time than at any previous period in its hitherto somewhat disappointing history. The British iron trade can but regard the Canadian Pacific with attentive interest, and it ought to afford it a profitable outlay for some of the rails which it can now produce in such large quantities. We trust that harmonious relations between masters and men will during the next four or five years enable our ironmasters to deliver English rails in Canadian ports upon terms which will secure them a ready market.

## COAL DUST AND COLLIERY EXPLOSIONS.

Seeing that we have on several occasions directed attention to coal dust in connection with colliery explosions—a subject which appears to have been either overlooked or considered to be too delicate a one to be touched by writers on mining subjects, we are glad to find that its importance has been recognised by the HOME SECRETARY, who has appointed Prof. ABEL to conduct a series of analyses and experiments with respect to coal dust, or other dust, in Seaham Colliery. We showed, however, that the investigations of Prof. NOBLE had not been confined to the dust found in the workings of the Seaham Colliery, but to that taken from some other mines as well. Mines, it may be said, vary a good deal; some are dry, and others wet that the workmen have to work where there is a great deal of water. Now, in a wet mine the dust must be perfectly harmless, seeing that it cannot well move about or rise to any distance, whilst on the other hand, in a dry pit the dust can not only impede the ventilation but may lead to an explosion as it gathers round the outside of the lamp. Therefore, what is required are experiments with quite dry dust, such as is to be met with not only on the floor of a mine but floating in the air-ways. The points laid down for the guidance of Prof. NOBLE are of great interest, but one item of great importance appears to have been overlooked, and to which we will hereafter draw attention. Taking the points seriatim we find they are—A. Samples of burnt dust found in the mine after the explosion to be analysed with a view to ascertain whether such burnt dust is—(1) the ash or product of dust burnt by an explosion of fire-damp; or (2), the remains or product of dust which itself has been explosively burnt (with or without fire-damp) whilst suspended in the air? This point appears to be somewhat abstruse, and not so clear as could be desired. From those who have had considerable experience of explosions of the greatest magnitude known we are informed that the dust can be ignited by the explosive gas, and that it will burn when suspended in the air on the application of a naked light. This can be easily shown by throwing some fine coal dust on to some coal, or even a candle, when it will burn just like so much powder. The manager of the Oaks Colliery, who has been connected with nearly all the great colliery explosions that have taken place in South Yorkshire, states that all the fires he had seen in a pit after an explosion had taken place had been caused by the dust.—B. As to how far the presence of such dust suspended in the air or lying strewn upon the ground or timbers in an enclosed gallery intensifies an explosion, and how far such coal dust in suspension in the air is capable of mischievous explosion by a shot, or by passing through a ventilating furnace with out the presence of gas, and what are the effects of a shot fired in a gallery (such as the air-ways of a colliery) in causing the disturbance and suspension in the air of such coal dust lying on the floor or timbers of a gallery.

We have it on good authority that coal dust is carried along with the life-destroying vapour of an explosion, and so intensifies its effects that men have been suffocated by it. On the firing of a shot in a dry and dusty mine it has been found to ignite and burn in the same manner as gunpowder. Of course the concussion caused by a shot causes the fine particles of coal to rise, and even to surround the lamp or lamps, the flame from which may be drawn through, and set it on fire. As a matter of course a shot in a dry mine will cause the dust to rise and continue in suspension for a short time. The dust in passing through a ventilating furnace has not been reported upon by any of our mining engineers that we are aware of, but it is not likely that the dust has done any damage under such circumstances. We have referred to the appointment of Professor NOBLE, and what he has been commissioned to investigate in consequence of having ourselves taken up the points on more than one occasion, and the importance of which, in our opinion, has been overlooked by our mining engineers. Mr. MORRISON, of Newcastle, in connection with another gentlemen, made some experiments with coal dust, whilst Mr. WILSON, of the Oaks Colliery, has also given a good deal of attention to the subject. But the exhaustive analyses of Prof. NOBLE will, no doubt, be far more exhaustive and valuable. However, as we stated at the outset of this notice, there was a most

important point omitted by the HOME SECRETARY or its advisers, it was whether it was likely that a safety-lamp in a very dry and dusty place or working place could be so surrounded with coal dust that the explosion following the firing of a shot took place, or a discussion of air caused by a heavy fall for the flame to be drawn through the lamp exploding the dust on the external portion of it. We consider would have made the investigations and experiments more complete than they will otherwise be. But in all probability Prof. NOBLE will not confine his researches to the points laid down for him, seeing that some of the experiments made may give results that will necessitate others in the direction to which we have called attention.

#### SANDERSON AND COMPANY (LIMITED).

An influential company with a capital of 10,000*l.*, in shares of 5*l.* each, has been formed to acquire and develop the business at present carried on at the Faraday Steamworks, Huddersfield, and Essex-Strand, under the firm of Sanderson and Company, as electric engineers, lighting conductor manufacturers, makers and fitters of electric bells, telephones, brass founders, and mediæval metal workers, and manufacturers of all other electrical and pneumatic appliances, and all the good-will, fixtures, stock-in-trade, book debts, machinery, plant, materials, and other interest, with all existing contracts and liabilities in any way belonging or appertaining thereto. The business has been established upwards of 25 years, and for the last four years has been successfully carried on by Mr. Solomon Sanderson in conjunction with Mr. W. F. Gillham, until the decease of the former gentleman in June last, when the business was left entirely in the hands of Mr. W. F. Gillham, the vendor, who has since carried it on with the assistance of Mr. W. A. Sanderson and Mr. W. Berry. Further capital being required for enlarged premises, various extensions, improvements, and additions to the plant and machinery for efficiently carrying out numerous large contracts on and with different firms and corporations, and in order to meet the growing demands of the district it has been determined to convert the undertaking into a joint-stock company. The contracts at present on hand will yield extensive profits during the next 12 months, and by judicious and economical working the directors hope to have a successful career in the future, and to be able to compete equally with other telegraph companies that have been paying large dividends. The late firm has within the past few years executed and successfully carried out extensive contracts with upwards of 20 municipal corporations in England and Wales; also contracts for the British Government, the Italian Government, and the Government of Jersey, in addition to contracts for a large number of railway, dock, and other companies, and numerous school boards, and the directors expressed with regard to their patent solid copper tape lightning conductor are highly favourable. Dr. R. J. Mann, late president of the Meteorological Society, writes that he likes the copper tape for the construction of lightning rods very much. He thinks it is preferable to the copper rope because it is compressed in the process of rolling instead of being strained as wire strands are in the manufacture of rope, and is, therefore, of more compact and condensed texture, and stronger. It possesses, at the same time, the flexibility and ready adaptability of rope, and can be rolled to any continuous length, which he considers to be of great practical importance. It is obviously an efficient conductor when of sufficient dimensions for the particular work of protection that it is required to perform, and lends itself very readily to the efficient construction of air terminals and earth contacts.

The micro-telephone invented by one of the directors is also likely to prove a great commercial success. A practical trial was made between the telegraph offices in the York and Darlington Railway stations (a distance of about 145 miles) with very successful results. The trials were of a practical and crucial character; conversation was carried on for nearly an hour between the two stations. Songs were sung at York which were distinctly heard all over the office at Darlington, and songs sung at Darlington were heard distinctly by the several officials at the York office. The numerals from 1 to 30 and the letters of the alphabet were distinctly transmitted from one office to the other; and an ordinary railway message in cypher, announcing the dispatch of several goods trains, was spoken by the clerk in charge at Darlington to the clerk in charge at York, and correctly received, and recorded as the first telephone message of the kind ever transmitted between these towns. The wire used was one of the ordinary ones on the poles alongside the railway, and the induction from the neighbouring wires was at times very powerful, but the micro-telephone succeeded in transmitting the recognisable tones of different voices through it all. The company's prospectus will be found in another column.

**THE HULL, BARNESLEY, AND WEST RIDING RAILWAY AND DOCK COMPANY.**—It was yesterday (Wednesday) announced by Mr. C. H. Wilson, M.P. for Hull, and head of the eminent shipping firm of Thomas Wilson, Sons, and Co., that he had become a director of the Hull, Barnesley, and West Riding Railway and Dock, which he spoke of as a thoroughly sound and necessary undertaking, in which people would do well to invest. The prospectus will come out on Monday next. Of the capital, 3,000,000*l.*, in 10*l.* shares, about half, including 100,000 taken by the Hull Corporation, is already placed.

**VARA MURRHINA GLASS COMPANY.**—The prospectus has been issued of this undertaking, which, with a capital of 150,000*l.* in 1*l.* shares is formed to purchase the patents of Mons. P. R. F. D'Humy, and to carry out, under his personal superintendence, the manufacture of all articles in glass, porcelain, pottery, or other materials of a similar description. After a lapse of 2000 years, the re-discovery by Mons. D'Humy of the ancient art of manufacturing murrhina glass, known to the Parthians and Egyptians—that is, the fusion and incrustation of gold, silver, and other precious metals in glass, thereby rendering it imperishable—is, the prospectus states, considered by connoisseurs one of the greatest discoveries of the age.

**LIGHT AND VENTILATION.**—Two of the most important subjects which have engaged the attention of mining engineers are the efficient ventilation and lighting of the workings under their control. In trade exhibitions of the past these subjects have not met with the important consideration which they demand; but we learn that prominence will be given to inventions bearing upon these topics at the forthcoming Exhibition of Heating, Lighting, and Ventilating Appliances which will be held at the Alexandra Palace from Dec. 22 to Jan. 11. The Exhibition will be held in the Great Central Transept and adjoining halls, and certificates will be awarded under the adjudication of competent authorities. The intended Exhibition promises to be a most, and specially attractive to the classes whose interests we represent, as also to the general public, as the display will include the applications of light, heat, and ventilation to domestic purposes. For detailed reference to the prospectus will be published next week.

**RAND ROCK DRILL.**—Reference has several times been made in the *Mining Journal* to the Rand Rock Drill, and it appears that the Rand Drill Company, who have it in hand, have introduced a fresh improvement, which brings it still nearer perfection. The rapid progress given by the drills upon the solid rock cause great vibration; this would tend to loosen the bar by turning the jack-screw in the place; to prevent this a lock-nut is used, which keeps the screw in place, and prevents any loosening of the bar after it is once set up. One of the most valuable features of this invention is its ready adjustment. The arms can be folded parallel to the bar, with the drills mounted upon them, and the whole plant lowered to its place in the shaft by the hoisting rope. By the use of rock drills mounted in this manner, shafts may be sunk at half the cost and in one quarter of the time that they can be put down by hand labour. In the manufacture of air compressors this company have been eminently successful; most of the large air compressors on the Comstock being of their make; they have also erected large and powerful compressors for many of the Lake Superior iron and copper companies, which are a great improvement on those of the Comstock. The air compressing plant built by them for the Calumet and Hecla Copper Company is perhaps the largest in the world; consists of two pairs of compressing cylinders, one pair being placed at the Hecla branch, the other at

the Calumet branch; both are driven by Leavett's compressed engines, which also do the hoisting, run the main engines, the pumps and the machinery in the rock houses. The improved arrangement will be generally appreciated by practical miners.

#### THE LEADVILLE MINING DISTRICT.—SUCCESSFUL ENTERPRISE.

The enormous mineral wealth of the Leadville district of Colorado has frequently been referred to in the *Mining Journal*, so that it is not surprising that a company possessing facilities for smelting should find an abundance of profitable employment. The success achieved by the La Plata Mining and Smelting Company proves not only that there is plenty of business, but that it yields a good profit. Before mentioning the company itself it may not be uninteresting to notice the mine from which the company takes its name—La Plata—inasmuch as the fact that it is at present producing from 30 to 32 tons of mineral per day affords ample proof that there will always be a good backbone of support, apart from the custom ore with which the smelting works will have to deal. The La Plata tunnel is now 700 ft. in length, and its face is in porphyry. Several cross-cuts extend to the east from the tunnel. In this portion of the mine a large amount of ore has been developed. An ore body 18 ft. in thickness is here exposed. A drift has been started west from these lower workings to connect with the Rustin shaft. The entire face of this drift is in ore, as well as at the top and bottom. At present the ore is taken to the foot of the winze, raised by a windlass, and then carried out in cars through the tunnel. At a depth of 42 ft., and from the drift running west and south, follows a large ore body for several hundred feet to the west and south. None of this ore has been taken out except that from the main drifts and a few prospecting cross-cuts, driven to demonstrate the extent of the ore body. These workings connect with the Rustin shaft, at a depth of 165 ft., or some 70 ft. below the level of the tunnel.

The shaft continues down for 37 ft. more. A vein of ore is here also found, upon which a drift has been run a few feet south and some 20 ft. to the east. Every attention has been paid to the laying out of the mine, so that it may be easily and quickly worked. In the main working shaft—the Rustin—the ore is only to be raised to the level of the tunnel, and then conveyed to the ore bins at its mouth. The drift running from the east workings will convey all ore mined in that portion of the shaft. The drifts from the bottom of the Rustin will be beneath the ore bodies now discovered and ore shutes can easily be built to connect with drifts below, and so allow the handling of all ores down hill to the shaft. The engine is being provided to hoist to the tunnel level. When this work is completed there will be no difficulty whatever in breaking and shipping from 75 to 100 tons per day, or more if required. As the further the property is worked into the hill the better becomes the quality of the ore, and the more extensive the ore bodies, the extent of the ore existing in the mines seems almost incalculable.

With regard to the quality of the ore, it appears to be all that can be desired; it is described as being of high grade in lead, running from 20 to 60 per cent.—a fair average of regular product is 35 per cent. The silver runs from 12 to 40 ozs., and averages about 20 ozs. The ore just as it comes from the mine is worth net about \$25 per ton on an average. The grade of ore is also improving, so it can be readily seen that from the wonderful bulk of ore developed, and from the fact that its uniform returns give such good results, that in the mines of this company is a bonanza, and the September product—\$236,716—seems to confirm this view. But for the moment the company's great, or principal, source of profit is the smelting business, which was, indeed, one of the chief objects originally in view. The La Plata Mining and Smelting Company, established in June, 1879, was formed to take over the business of Messrs. Wetherall, Burdell, and Co., public smelters, of Leadville, Colorado. It paid, on Oct. 1, 1879, its first monthly dividend of \$15,000, or at the rate of 9 per cent. per annum. This rate has been fully maintained since; and Mr. Francis Andrews, of Great Winchester-street, the London registrar of the company, now forwards the usual semi-official intimation to the effect that "the board of directors of the La Plata Mining and Smelting Company announce the fifteenth consecutive monthly dividend of \$15,000 out of the profits for the month of October, being at the rate of 9 per cent. per annum."

The company, which is under the control of a well constituted board of direction—including, in addition to Messrs. Wetherall and Burdell, the original proprietors, the Vice-President of the New York Stock Exchange, Mr. Charles Mason Stead, of the firm of Allen and Stead, stock-brokers, of Broadway, New York—appears to be managed with great energy and judgment, for in addition to paying the handsome dividends mentioned, they have increased the capacity of their smelting works from 55 tons to 120 tons per day, and this out of profits and without trenching on the working capital of \$100,000. Moreover, they have accumulated a reserve fund of upwards of \$50,000. The company are already quoted on the New York Stock Exchange, and have applied to the London Stock Exchange for a quotation here also. The shares are \$10, or 2*l.* each, full paid up, and are quoted here 1*l.* 7*s.* 6*d.* to 1*l.* 10*s.* per share, at which price, according to the dividend declared, they show upwards of 12 per cent. to a buyer. The company are stated to have thus far earned their dividends solely by acting as public smelters, while they were developing their mines, but from what has already been said with regard to the nature of the mineral deposits in the company's property, and the steps taken to develop them, it will be readily understood that as soon as the preliminary operations are completed the mines will add considerably to the already large profits.

#### DEVON GREAT CONSOLS.

The shareholders may well be congratulated on the position and prospects of their enterprise, indicated by the declaration of another dividend of 6*s.* per share, announced at the meeting on Wednesday, of which a full report will be found in another column. This state of affairs is the more gratifying when it is considered how nearly the concern had approached bankruptcy and dissolution when Mr. Peter Watson assumed the management and chief control, and how much has had to be expended in bringing about the very satisfactory change which has been produced. Comparing the present appearance of the mines with their condition 18 months since the contrast is striking—great discoveries are being made, the average produce of the copper ore sent to market is increasing (and it must be recollected that increase of produce represents so much additional profit), and large quantities of arsenic are raised and sold at a good price. The 6*s.* dividend declared on Wednesday completes the 160 per cent. per annum on the par value of the shares, and, as the Chairman stated, gives a *bona fide* 10 per cent. per annum in hard cash, even to purchasers at 16*l.* per share, which it appears is but half the amount at which they were marketable when the concern was similarly prosperous, and when the prospects were certainly no better.

Referring to the large and necessary outlay for the erection of additional machinery at the Watson's part of the mine, it was mentioned that they had forked the main shaft, which was full of water, and that it was now cleared and timbered, and they were in full swing at the 70 level, and that everything was now in excellent condition. As to the finances, nothing could be more satisfactory than the fact that the half-year's accounts show that after the payment of the 152nd and 153rd dividends in the six months, and the payment of the several amounts mentioned in the accounts, amounting to about 1140*l.*, there is the satisfactory sum of cash and bills receivable in hand of 7044*l.* 6*s.* 4*d.*, as against a credit balance of only 2880*l.* 8*s.* 2*d.* in the corresponding half-year of 1879, and 1661*l.* 2*s.* 6*d.* in 1878. All would doubtless consider that exceedingly satisfactory. In the last half-year's accounts was stated the heavy outlay incurred in rock-boring machinery, &c., and the board now point with satisfaction to greater expedition in driving the levels, as mentioned in Capt. Isaac Richards, very full and encouraging report. There is a further outlay to be made here, and the chairman desired to put it fairly, as he did two years ago or over, when he stated that it would be much better to forego a dividend or two, or even three dividends, and to erect proper boring machinery to keep pace with the times and work the mine vigorously. He stated

that because he felt it to be in their interests, and considering the welfare of the company. But notwithstanding this expenditure and this large amount of work paid very handsome dividends.

The rock boring and other modern appliances introduced have proved highly successful, but the executive appear thoroughly to understand where the economy of machine mining begins and ends, and have thus wisely determined not to substitute rock breaking machinery for the hand labour now employed. Were the advantages merely equal in a commercial point of view, it would be undesirable to deprive of employment the numerous boys and girls who now earn their livelihood on the dressing floors, but as a matter of fact the circumstance that the rock-breaker would pulverise the ore at one-twelfth the price of hand labour proves nothing, because the boys and girls exercise ability and judgment in separating the minerals, which would be impossible with a machine, and the Devon Great Consols ore being of low produce, the inevitable result would be that instead of obtaining 5000 or 6000 tons of ore, worth 13,000*l.*, in the six months with the labour of the boys and girls they would with the machine crush 50,000 tons in six months, the whole of which, however, would be such an inseparable mixture of ore and attle that it would be totally worthless. As to the suggestion to abolish the Cornish Ticketings altogether, and sell all Devon and Cornish ores at Swansea, where there is more competition and prices as a rule are higher, it is well worthy of consideration, and may be hereafter discussed. All these and the many other matters referred to at the meeting naturally satisfied the meeting that the executive were doing their utmost for the shareholders, and doing their work well, so that it is not surprising that the energetic Chairman and managing director—Mr. Peter Watson—and his colleagues, as well as the agents and workmen at the mines, were accorded a hearty and unanimous vote of thanks for what they have done.

The Devon Great United Company, being under the same management, and the shares being held to a great extent in the same hands, it may not be out of place to refer to the meeting of its shareholders, fully reported in another column, which immediately followed that of the older company. The Chairman—Lord Claud Hamilton—in moving the reception of the report, expressed the wish that those who, like him, had had the pleasure, as he had, of visiting the mine some short time since, and he hoped they were as much gratified as he was on seeing the property, and seeing what a hopeful undertaking they had taken in hand. Everything which had happened since the date of that visit had been of a satisfactory nature. The progress of the works had been as rapid, if not more so, than was anticipated. The machinery was working exceedingly well, the reservoir was fulfilling the object for which it was formed, and the pumping process was producing all the results which were anticipated. Therefore the directors were highly satisfied with the progress made. The managing director—Mr. Peter Watson—also expressed himself well satisfied with the prospects of the concern, and Mr. Moses Bawden, the purser, explained the bearing of the lodes in relation to those of Devon Great Consols. He had never seen so much work done in so little time as at Devon Great United. He was sure the outlay for bringing in the water from the Tamar would repay for the outlay fifty-fold, for the water coming from the mine was so impregnated with copper that all the works and the boilers would have had to undergo a thorough repair every three years. There would be enough water for dressing purposes. It had been stated in the *Mining Journal* that the great cross-course in Devon Consols cut off the Devon Consols lodes going west. Now this was a great mistake. The first discovery of ore in Devon Consols was made 70 to 80 fathoms near the United than the cross-course. The Devon Great Consols lode as it got near Devon Great United split, but not on account of the cross-course, but on account of a little rising in the ground called Capel Tor. The meeting appeared well satisfied with what had been done, and fully confident of the future of the enterprise.

#### RUSSIA COPPER COMPANY.

The report of the liquidator and committee of share and debenture holders, prepared for presentation at the meeting to be held on Dec. 9, has been issued, accompanied by the full details of the scheme for the reconstruction of the company. The company's indebtedness is—Debenture-holders, 81,468*l.*; Russian mortgages, 30,000*l.*; sundry creditors, 28,907*l.* 13*s.* 4*d.*=140,375*l.* 13*s.* 4*d.* On the other side of the account the company have stocks on hand, 64,344*l.* 4*s.* 5*d.*; sundry debtors, 14,870*l.* 9*s.* 11*d.*, and cash in Russia (there is none in England), 8128*l.* 18*s.* 11*d.* The total loss to June 30 was 60,363*l.*, and the loss on the 12 months' working to that date was 1923*l.* 12*s.* 7*d.* The capital expended for purchase-money, buildings, &c., has been 280,836*l.* 18*s.* 9*d.*, and the movable plant is valued at 8206*l.* The report states that the liquidator and committee are of opinion that the time has now arrived when, in the interests alike of shareholders and debenture-holders, the company should be reconstructed, and with this object the present position and prospects of the company have been most carefully considered by them. It is now a favourable time for paying off the mortgages in Russia, which are a first charge on the company's estates. These mortgages in the accounts stand at 30,000*l.*, and at the present rate of Russian exchange a sum of about 25,000*l.* would be sufficient for the purpose. The annual charge on the profits for interest on these mortgages is about 2100*l.*, and the paying of them off would increase by that amount the annual profits available for division. The liquidator and committee consider it most essential that in any reconstruction of the company these mortgages should be paid off, and to do this the money would have to be found by the shareholders.

As to the manner in which the funds are to be raised, it is explained that it would be necessary to ask the debenture-holders to allow the whole amount of principal and interest due to them of 81,468*l.* to remain unpaid for five or six years. The proceeds of any portions of the company's freehold properties whenever realised to be applied *pro rata* in repayment of the debentures. The company to have power to pay off the debentures at any time at par. In order to provide for contingencies, and for working capital for any extensions of the business, powers should be taken to borrow further amounts, not exceeding in the whole 20,000*l.* With regard to the present share capital of the company, the liquidator and committee consider the best proposal would be to create, in lieu of the present 29,890 shares of 10*l.* each, an equivalent number of shares of 7*l.* each, with 5*l.* per share credited as paid up thereon, leaving a liability of 2*l.* per share. Of this liability only 20*s.* per share to be called up in the meantime—10*s.* per share to be paid on allotment, and 10*s.* per share to be called up as required for paying off the Russian mortgages, but no part of it earlier than three months from the date of the confirmation of the reconstruction scheme by the Court.

The liquidator and committee being of opinion that it was necessary before bringing the question of reconstruction before the shareholders in any form to ascertain the views of the debenture-holders, the liquidator has, by informal meetings with the largest holders of the debentures and otherwise, ascertained the views of the holders of more than three-fourths of the whole debenture debt. The scheme of reconstruction sent with this report, and which will be submitted to the meeting for consideration, is the result of these meetings and negotiations, and contains the utmost concession to the shareholders which the debenture-holders will make.

**NEW ZEALAND CHROME.**—Messrs. Irvine and Tutton, of Nelson, New Zealand (July 17) write that the ore they are now raising has been assayed at the Government Geological Laboratory, and yields 64.80 per cent. of oxide of chromium, and has a specific gravity of 4.246. They add that understanding that the market price for chrome iron ore has advanced in Europe and America, in consequence of an increased demand for it, while the supply is limited, they are led to draw attention to the fact that the ore is to be found in large quantity in the neighbourhood of Nelson, and in particular that they have under their control a large tract of country in which powerful lodes and reefs of chrome exist, the mineral being also equal in quality to any offered in the English market. They are in a position to enter into business arrangements for a continuous supply of chrome ore, if an adequate price can be offered for a good article. They would prefer

# Sanderson and Company, Limited.

Incorporated under the Companies Acts, 1862, 1867, 1877, and 1879.

CAPITAL £10,000, IN 2000 SHARES OF £5 EACH.

Of which the remaining 1560 shares are offered to the public for subscription at par, payable £1 on application, £2 on allotment. Further calls will not exceed £1 per share, at intervals of not less than three months. The full amount of shares may be paid up on allotment, if desired. Interest at Five per Cent. will be allowed on all payments in advance of calls. Where no allotment is made the deposit will be returned in full.

## DIRECTORS.

WILLIAM D. BERRY, Esq., Huddersfield—MANAGING DIRECTOR.

WILLIAM F. GILLHAM, Esq., Rydes Hill, Guildford, Surrey.

The Rev. HENRY HUNNINGS, M.A., Rothwell, Leeds.

HENRY MARRIOTT, Esq., Clara Street, Huddersfield.

WILLIAM ALEXANDER SANDERSON, Esq., Telegraph Engineer, Huddersfield.

BANKERS—THE HUDDERSFIELD BANKING COMPANY, HUDDERSFIELD.

SOLICITORS—LEAROLD AND CO., Buxton Road, Huddersfield.

SECRETARY (pro tem.)—FRED CARTER, 4, Cloth Hall Street, Huddersfield.

REGISTERED OFFICE AND WORKS—THE FARADAY STEAM WORKS, FIRTH STREET, HUDDERSFIELD.

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This company has been formed for the purpose of acquiring the business at present carried on at the Faraday Steam Works, Firth-street, Huddersfield, and at No. 44, Essex-street, Strand, London, under the style of "Sanderson and Company," as electric engineers, lightning conductor manufacturers, makers and fitters of electric bells, telephones, brass founders, and medieval metal workers, and manufacturers of all other electrical and pneumatic appliances, and all the goodwill, fixtures, stock-in-trade, book debts, machinery, plant, materials, and other interest, with all existing contracts and liabilities in any way belonging or appertaining thereto.

To do all things expedient for introducing and bringing into use electric force and power for producing light, to secure its adoption, and to manufacture, import, and supply all material necessary for the same, and for the manufacture of insulated wires and underground cables for general electric and telephonic purposes, as well as lightning conductors; and to acquire by original application or otherwise any Letters Patent, rights, privileges, or monopolies for the sale, use, or manufacture of or otherwise relating to any telephone or telephonic apparatus, or apparatus connected with electric lighting, or electric or pneumatic bells, or lightning conductors, or any other invention, instrument, apparatus or material connected with the same.

To take contracts for the repairing, pointing, or building of chimney shafts, church spires, or other buildings, and to manufacture, purchase, or acquire the requisite materials for the same, or in any way connected with the things before mentioned, or with such business.

To bring within the reach of the public the use of the telephone in all the operations of Government, commerce, and daily domestic life, without the intervention of a third person.

delivering the ore on the wharf at Nelson, but if required it could be consigned to purchasers at some British port.

## Original Correspondence.

### INDIAN GOLD MINES.

SIR,—As some portions of our auriferous land have recently been sold in the Wynad district to separate companies, it will be interesting to shareholders in the early undertakings to calculate what is likely to be the value of their property taking the recent sales as a basis. In making the following calculations I wish it to be distinctly understood that I do not do so in any carping spirit—on the contrary, my ideas of the value of auriferous land in the South Indian districts are, perhaps, in advance of anything that has yet been dreamt of. The following calculations will throw some light upon the subject:—If the land (50 acres) acquired by the Rhodes Reef Company for 130,000l. be worth that sum, as no doubt it is, what is the value of the 3000 acres held by the Indian Glenrock Company?

—Answer: No less than 7,800,000l., equal to 78l. per share.

It seems to have been forgotten that one of the reefs in the Glenrock estate is more than a mile in length, whereas Rhodes Reef is believed to be about 25 chains only. I do not suggest that Rhodes Reef is not very valuable, but that assuming it to be so the Glenrock reefs must be 60 times as valuable. If the directors of the Glenrock and South Indian companies will sell their property in plots of 30 acres (the area suggested by Mr. Brough Smyth as sufficient for any company to work), the shareholders of both undertakings would shortly be able to pension off the board, and the balance would, when divided, be a very handsome fortune to—

A LARGE HOLDER AND FIRM BELIEVER IN INDIAN GOLD MINES.

P.S.—It is only fair to state that the South Indian Gold Mine is the first to prove the value of its property at depth, one of the reefs having been tested 30 ft. below the outcrop showing visible gold. The machinery ought to be delivered at the mine before the close of the year, and I am confident when in full work the result will be something extraordinary.

### FLAGSTAFF MINING COMPANY.

SIR,—I beg to call your attention to the incorrectness of the information on which you based your editorial remarks last Saturday. It cannot appear from Mr. McCormick's telegrams that Mr. Vincent has been appointed in my place here to negotiate the sale of the mines, because the fact is that the property has been sold at Utah by my principals themselves to Mr. Vincent at the price of 27,500l. I need scarcely say that the contract is made with Mr. Vincent as the nominee of the parties, who have there paid the deposit, and who are granted by the contract a limited time within which to complete the purchase.

I hope the transaction may be duly completed, and that the American Mining Company may have no further occasion for my services. In the event of the sale falling through I have no doubt the negotiation for a sale in this country will again be placed in my hands, as I hold very many proofs of the unabated confidence of the vendors. On the terms and conditions of the proposed new company—as made known to me—I make no comment. I am not connected with it. As trustee of the debenture-holders I shall on their account be watchful.—Great Winchester-street. E. PEARSON.

### WEST GODOLPHIN MINE.

SIR,—The report of the meeting which appeared in last week's Journal presents an account so at variance with the actual state of the mine that I consider it my duty, as the chairman of the late company, to publish full particulars of the real position of the property at the time of its abandonment, in order to protect the public, who, relying upon the accuracy of the published statement, might be investing in the shares; and unless I am assured that the erroneous statement to which I object will be immediately withdrawn, I will forward you a further communication, for publication in your next issue. ROBERT WILSON.

London, Nov. 26.

[For remainder of Original Correspondence see to-day's Supplement.]

SELF-ACTING ATMOSPHERIC ENGINES.—Some improvements in self-acting atmospheric engines, or perpetual motion machines, were provisionally specified by Mr. W. M. Harwood, of Manfield, but he abandoned the project before obtaining a patent. He claims that the utility of the self-acting atmospheric engine will effect a saving of considerably over 120,000,000l. per annum in Great Britain and

To establish and conduct in all parts of the United Kingdom telephone exchanges, wherever a sufficient number of subscribers can be found who are willing to avail themselves of them. For domestic purposes exchanges can be connected with any public buildings, cab-stands, telegraph offices, police stations, fire stations, shops, &c.

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To do all such things as are incidental or conducive to the attainment of the above objects.

Purchasing under very exceptional circumstances, the company has acquired upon the most favourable terms the whole of the present property, consisting of plant and machinery, fixtures, contracts on hand, and other assets.

The vendor having every confidence in the future prospects of the company retains a very substantial interest in the company.

List of subscriptions to exchanges and rentals of private stations may be had on application at the offices of the company.

The Memorandum and Articles of Association, and the agreement with Mr. William F. Gillham and Mr. William D. Berry, can be seen at the offices of the company, and copies of the prospectus and forms of application for shares, or any further information, may be obtained at the offices of the company, and also of the bankers, solicitors, and secretary.

Early application is necessary to secure allotment. The list of applications will remain open until the 11th day of December, 1880. FRED. CARTER, Secretary (pro tem.)

Ireland in fuel, labour, and materials. It is fortunate the inventor abandoned the patent in time, and thus avoided the risk of his fabulous profits proving too much for him.

### INDIAN GOLD MINES—THE MYSORE DISTRICT.

The attractiveness of the Mysore district was prominently referred to in last week's Journal by Mr. A. Hay Anderson, and it is not improbable that the excellent record he gave of it may have assisted, if assistance were necessary, in attracting careful attention to the great mineral wealth of the district. But be this as it may the Mysore companies have been in great favour throughout the week, and the Mysore Reefs Gold Mining Company—the last put upon the market—has already had so many applications that in the course of a few days the list of subscriptions will be closed. The property, as has been already explained, covers about 320 acres, with a run of about 1200 yards north and south on the course of the auriferous quartz reefs, and a width of about 1200 yards from east to west. The land has been selected in this way so as to take in all the main reefs, and as little barren ground as possible. The Oregum Gold Mining Company, the Mysore Gold Mining Company, and the Madras Gold Mining Company have properties immediately adjoining this company's on the north and south, and the same auriferous reefs traverse each property. The present market value of the shares of the above companies affords tangible proof of the estimation in which the reefs are held, the Oregum shares being quoted 300 per cent. premium; the Mysore, 150 to 175 per cent. premium; and the Madras Company, 50 per cent. premium.

The natives were, as will be seen from the prospectus in another column, in the habit of working these fields in the rudest and most primitive manner, and they appear to have been unable to devise means for getting rid of the water beyond a depth of 12 fms.; thus they have only worked at the off-shoots from the main lodes, which are all true auriferous fissure veins. One of the auriferous lodes which runs through this property into the adjacent Oregum Gold Company's block has been proved to a depth of 90 ft.; and, at about 80 ft. from surface, 17 tons of quartz were raised, which yielded a bar of gold weighing 40½ ozs. (assay 92½ per cent. of gold and 7½ per cent. of silver), equal to 2 ozs. 8 dwts. per ton, and later reports state that 9 tons of quartz from an adjacent lead gave 27½ ozs. of gold, and stone of equal richness is now being raised. The result of the workings on the adjoining Oregum Gold Company's block shows that at a depth of 15 fms., levels can be driven, and auriferous lodes which traverse this property can be worked, yielding quartz which assays 2 ozs. 8 dwts. per ton. The directors have every right from past experience to assume that this average will increase with depth; they have based their calculations of profit upon mining, milling, and reducing, during the second half of the first year, 50 tons per day, and this would give, assuming the ore to yield but 1 oz. of stone to the ton of stuff, an amount of profit which will place the Mysore Reefs Company in a very proud position in the Dividend List. As the direction and management will be in the hands of competent and experienced men, there need be no doubt that the resources of the property will be availed of to the utmost.

POWERS OF DIRECTORS.—The Master of the Rolls has decided in the case of the Alma Spinning Company that where the number of directors is reduced below the minimum named in the Articles of Association they have no power either to make calls or forfeit shares. In this case a retiring director's shares had been declared forfeited; soon after the mill was burned down, and he claimed his share of the insurance, repudiating the forfeiture. The learned Judge declared the forfeiture void, but, of course, ordered the payment of arrears of call due in order to be allowed to participate in the assets.

GUNPOWDER MANUFACTURE.—An improved press for the manufacture of prismatic gunpowder, in which the pistons serving to compress the powder within the moulds are actuated by two pairs of eccentrics fixed on the main shaft of the machine, has been invented by Mr. HERMANN GRUBSON, of Buckau, Magdeburg. The two eccentrics of one pair which are of equal eccentricity, and whose angular position with regard to the shaft is the same, are connected by means of suitable rods to the pistons of a cross-head moving in vertical guides above a table provided with moulds. The eccentrics constituting the second pair are also equal to each other with regard to their eccentricity and their position on the shaft, but different in these respects from the first pair. They are connected to a second cross-head moving in guides below the said table. Both cross-heads are provided with pistons corresponding with the holes or moulds in the table, the said moulds being of hexagonal or other appropriate form. The material out of which the powder prisms are to be pressed is put in duly reduced state into a hopper from which a slide actuated by a

cam disc feeds at every stroke a like quantity into each mould. The upper pistons hereupon descending and entering into the moulds, and the lower ones rising, the powder is compressed between the pistons. The upper pistons thereafter leave the moulds and rise to a certain distance from the table, while the lower pistons continuing to ascend, though at a smaller speed, push the finished prisms out of the moulds. The slide now advancing again shifts the pistons forward on to the table and out of the way of the pistons.

## FOREIGN MINES.

ST. JOHN DEL REY.—Telegram from Morro Velho, dated Rio de Janeiro, Nov. 22: Produce, 11 days, first division of November, 6500 oits., value 2311l. 5 oits. per ton. Profit for the month of October, 1700l. All going on well. RICHMOND CONSOLIDATED.—Telegram from the mine at Eureka, Nevada, Nov. 22: Produce, 11 days, first division of November, 6500 oits., value 2311l. 5 oits. per ton. Profit for the month of October, 1700l. All going on well.

—R. Rickard, Eureka, Nevada, Nov. 3: Lizzie Tunnel cross-cut has been extended 14 ft.; the ground in the present end is much more favourable than it has been for some time. The 200 north cross-cut has been drifted 5 ft. in hard ground. The 500, south east from No. 14 chamber, has been drifted 5 ft. in hard ground; this is being drifted to connect with a winze sunk in ore from the upper part of No. 14 chamber. The 500 north, from No. 12 chamber, has been drifted 5 ft. in hard limestone. The 500 west drift has been advanced 12 ft.; the ground is softer, and has the appearance of nearing shade. The 600, north from No. 14 chute, has been extended 3 ft. in very hard limestone. The 600, south from west drift, has been advanced 17 ft.; the ground in the present end is looking very favourable for striking ore. The 600 south, on fissure, has been drifted 7 ft., without any change to mention. The 700, west from shaft, has been advanced 4 ft. in hard ground. The 700, north-west from winze, has been extended 21 ft. in favourable looking ground. The 700, south-west from winze, has been drifted 14 ft., without any change. The 800 west drift has been extended 13 ft. in compact limestone. The 800 north, on fissure, has been extended 13 ft.; the ground looks very favourable for striking ore. The 800, south-east from shaft, on quartzite, has been drifted 4 ft.; work has been resumed in the drift to explore on the contact up to the Compromise lode, where we find some ore making down on the quartzite 40 ft. above the 800. The 900 west has been drifted 18 ft. in hard ground. The 900 north, on fissure, has been advanced 7 ft., without any change. The winze sinking below the 900 north is down a total depth of 13 ft.; the fissure is well defined, and favourable for ore. The chambers are looking well; on the whole, they are improved since last week. The chambers were closed down on Tuesday for general repairs, and will start again this evening.

TOLIMA.—The Trias September returns show a profit of 81-6%. The underground agent reports 376-5 ft. of ground expended, of which 50-5 ft. were unproductive, leaving 286 ft. of productive ground. The superintendent, in referring to the prospects of the mine, says that the last few feet sunk in the engine-shaft have shown a marked improvement both as regards the quality and quantity of the mineral existing in the vein, which in the present sole is more or less mineralised throughout a width of 6 ft.

UNITED MEXICAN.—E. Hay, Guanajuato, Oct. 21: Mine of San Cayetano de la Ovejera: We fully expected a larger extraction of ore from the Purisima during last week, but in spite of the favourable appearance it had the strip of ore continued very poor until a couple of days ago, when ore has been thrown down in that point. This change corresponds with one that took place this week in the lode; the veins have been following straight and true, and which has fallen off in value lately, divided into two branches, the one to the also being the continuation of the original lode, running about south by west, has dwindled to a narrow barren costa; this branch has been driven on until last Saturday. The other branch to the bajo is more robust, and in ore it goes off to the north-west of the former bearing of the frente, and was discovered stopping to the bajo of the working; it seems to be more than a branch, and to be rather another lode belonging to the north-west and south-east system. On this vein we are now driving, but the advance on the original costa will be resumed later on if future discoveries encourage us to do so. The stopes in the end and contratiello of the old workings continue in ore. We have not yet found any pinatas in the end of San Mateo del Alto; the costa is no longer ramified, but has taken a more massive appearance between well-defined walls. In visiting the old workings in the continuation of the first frente to the north-west on the road going upwards from the despacho of La Purisima, Mr. Aguilar discovered a cross-cut to the alto filled with little, the greatest part of the lode running down the pozo de guía coming from this cross-cut shows that there must be more or less extensive workings to the alto, perhaps on the same lode we work on in the Purisima, as we consider this an interesting point we have begun clearing it. The new cross-cut to the bajo, called La Fortuna, has already begun. —Mine of San Antonio de la Ovejera: The lode in the end of San Juan is now nearly 1 metre broad, and of a more formal appearance than when I wrote last. —Mine of El Diamante: We must be very near the lode, because we have encountered a break in the rock, that probably is the upper wall of the vein.

CANADIAN COPPER.—F. Bennett, Nov. 12: Bolton Mine: The cross-cut through the vein at the 10, south of north shaft, is now in hard indurated stone that contain small branches of mullite and copper ore; the width of the vein passed through is from 15 to 17 ft. In the 10, north of the shaft, the portion of the vein carried is about 5 ft.; the vein is largely composed of slate, in which are found good stones of rich yellow copper ore. The general appearance of the vein, its surroundings, and indications are such as would, I think, be accepted as fully entitling a thorough trial of its productiveness. —St. Francis Mine: We have made fair progress in building in the boiler, &c., preparatory to draining the mine, and have resumed the driving of the adit level east of the shaft. There is about 3 to 4 ft. of vein rock in this drift, and enclosed in the vein rock there is a branch or leader composed principally of carbonate of lime of about 4 in. wide in the back of the drift, and increasing to 8 in. in the face of the drift. The back of the drift there is about 1 in. of solid purple ore, which in the bottom becomes scattered in the entire width of the branch. —Acton Mine: There is no change of importance to report; the 30, east of No. 5 shaft, is much as last reported. —Hartford Mine: The winze in the bottom of the 50, east of No. 7 shaft, still continues to look well. The stopes are also yielding a fair amount of good ore. [For remainder of Foreign Mines see this day's Supplement.]

NEW KITTY.—The readers of this Journal have been from time to time prepared for the future of this mine. The reports continue to be of such a character as to apparently ensure a large increase in the market value of the property; so much so that the shares are increasing demand, and it is believed that immediate returns will be made when the water is forked. Should the independent testimonies be correct a repetition, on a large scale, of West Kitty surprises is inevitable, and now New Kitty is not selling for more than 9000l., whereas West Kitty is selling for 15,000l., and no doubt is likely very quickly to double in price. This, however, only goes to indicate the future of New Kitty. It is satisfactory also to know that the two companies, although distinct and under different management, are friendly, and that there cannot be any dispute as to boundaries. This is important when we calculate that the discovery in West Kitty has already resulted in about 10 fathoms of ground producing 900l. worth of tin.

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JONES v. CHORLEY.

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2.—All those SEVERAL PIECES or PARCELS of LAND, part of the Lands of Tuitarne, in said Barony and County, containing 1 A. 1 R. and 28 P. statute measure.

3.—All that PIECE or PARCEL of LAND, being part of the said Lands of Cargan, containing 2 P. statute measure. All held in fee simple, together with the Rails, Sleepers, Points, Gates, Bridges, Fences, Drains, Crossings, Engine Shed, Houses, Drum or Hoist Drum House, Wire Ropes, Runners, and all other the Fixtures and other Property upon the said Lands.

**DESCRIPTIVE PARTICULARS.**

The Property to be sold comprises the several parcels of land above mentioned, upon which there has been constructed a Railway laid with steel rails of about 54 lbs. to the yard. The line has been laid in the best manner, and properly bridged and drained, and gives communication from the Townlands of Tuitarne, Legagrene, Skerry East, and neighbouring townlands, being an extensive district, rich in iron ore, and in which large and profitable mining operations are being carried on, to the Ballymena, Cushendall, and Redbay Railway, by means of which line minerals can be carried and laid down for shipment on the quays at Belfast and Larne.

The Property is completely fenced in, and there is a large engine-house and dwelling-house suitable for a caretaker on the land. At one portion of the line there is a considerable incline, which is worked by means of a double wire rope and drum. The whole property is in complete working order, and has been quite recently used for the transit of iron ore by the Crommelin Iron Ore Company.

The nearest railway station to this railway is at Ballymena.

The Abstract of Title and Conditions of Sale under and subject to which the Property will be sold, may be seen at the Offices of the undermentioned Solicitors for the Vendors at Belfast.

For further particulars, apply to—  
Messrs. MCGILL, DONALD, AND COMPANY, Solicitors, 172, St. Vincent-street, Glasgow;

Messrs. JOHNSONS, UPTON, BUDD, AND ATKEY, Solicitors, 20, Austinfriars, London, E.C.;

Messrs. CRONHELM, SON, AND TOBIAS, Solicitors for the Vendors, 22, Lombard-street, Belfast, and Eustace Street Buildings, Dublin;

HUGH C. CLARKE AND SON, Auctioneers, Rosemary-street, Belfast.

**RE FOWLER'S PONTYPRIDD STEAM COAL COMPANY (LIMITED).****IN VOLUNTARY LIQUIDATION.**

**TO BE SOLD, BY PRIVATE TREATY**, all that VALUABLE STEAM AND BITUMINOUS COAL COLLIERY, the property of the above company, together with the COLLIERY PLANT and MACHINERY, and also the COTTAGES, BRICK-KILNS, COKE-OVENS, OFFICES, and BUILDINGS attached thereto. The entire taking comprises an area of 823 acres or thereabouts of the celebrated Rhondda Steam Coals, and as to a large portion thereof includes Nos. 1, 2, and 3 Rhondda Seams of Bituminous Coal.

The royalties are fixed at the exceptionally low rate of 6d. per ton of coal raised, with no underground wayleave between the several properties embraced in the taking, and the certain rents are moderate, and merge in the royalties.

Two pits have been sunk and completed to the Upper Four-foot Seam, with all necessary appliances. The engines, machinery, and plant are of the best description, with Waddle's fan and ventilating machinery. The total outlay to the present has been about £23,000.

The property communicates with the Taff Vale Railway, and is situate at Pontypridd, within 1 1/2 miles of the port of Cardiff and Penarth Dock, and is, therefore, more favourably placed in this respect than any other steam coal colliery in the neighbourhood.

The colliery having been only recently suspended as a going concern the same is in perfect order, and a large output can be immediately worked therefrom.

The company also hold on a 99 years' lease a LARGE TRACT of BUILDING LAND adjacent to the colliery, part of which has already been sublet at an increased rental. This is also the property to be sold.

Personal applications only will be entertained, and appointments can be made by communicating with Messrs. GROVER and GROVER, Solicitors, Cardiff and Pontypridd, or addressed to the Liquidator, at Beach-road, Penarth, Cardiff.

HERBERT KIRKHOUSE, Liquidator.

**OLD GUNNISLAKE MINE.**

**TENDERS** are invited for the SUPPLYING of a NEW AIR COMPRESSOR, 12 in. diameter and 4 ft. stroke (to be worked direct from back end of piston rod of the engine now on the Mine), together with NEW or SECONDHAND RECEIVER and CONNECTIONS, and subject to the drawings and specifications of the company's engineer, which may be seen at the office on the Mine on and after the 20th instant.

Tenders to be addressed to Capt. SKEWIS, the Manager at the Mine, marked "Tenders," on or before Tuesday, the 30th inst.

The company do not bind themselves to accept the lowest or any Tender.

**WHEAL UNY.**

**TENDERS FOR PERSEVERANCE SETT.**  
In accordance with Resolution of a Special Meeting, the Committee are prepared to RECEIVE TENDERS for the PERSEVERANCE portion of this settlement, with the MACHINERY and MATERIALS thereon.

Tenders must be delivered to the Purser not later than noon on the 2nd of December next.

The Committee do not bind themselves to accept the highest or any tender. Full particulars can be had on application to Capt. EDY, on the Mine; or to R. H. PIKE and SON, Purser.

**JULEFF'S CRUCIBLE MANUFACTORY,**  
TREVINGE, REDRUTH.

(Established upwards of One Hundred Years)

**FOR SALE, BY TENDER.**

The above business was carried on by the late Messrs. JAMES JULEFF and SON, and now in FULL COURSE OF WORKING.

For further particulars, apply to Miss JULEFF, the proprietor, to whom tenders must be addressed not later than the 20th December, 1880.

**TO BE SOLD, BY PRIVATE CONTRACT, a VALUABLE FREEHOLD RESIDENTIAL MINING PROPERTY**, being a portion of

**THE RUMLEIGH ESTATE.**

Containing about 162 acres, in the parish of Bere Ferris, near Tavistock, Devon. The mansion commands beautiful and extended views of the River Tamar and surrounding country. The well-known character of the ground and the immediate vicinity of large and important lodes afford substantial evidence that large deposits of minerals underlie the property.

The estate possesses wharfage to the river, and large brick and tile works.

For further particulars, apply to Messrs. RAWLSON and SQUAREY, Salisbury, and 22, Great George-street, Westminster; and Messrs. CARLYON and SON, Truro.

**TO BE SOLD, BY PRIVATE TREATY, THREE HUNDRED VERY SUPERIOR 8-ton COAL WAGONS**, built in the years 1873 and 1874 by OLIVE, of Bury, and the Midland Wagon Company.

The whole have been very little used, and are nearly as good as new. For further particulars, apply in writing to "Box 209," MINING JOURNAL Office, 26, Fleet-street, E.C.

**TO BE LET, OR SOLD, the GILFACH or WHITLAND ABBEY GREEN SLATE AND SLAB QUARRIES**, situated about four miles from the Narberth Road Station on the Great Western Railway, SOUTH WALES.

For particulars, apply to the Proprietor, Capt. OWEN W. GEORGE, Plas Cwm, near Narberth, Pembrokeshire; or H. E. TAYLOR, Esq., 15, Newgate-street, Chester.

**TO BE LET ON LEASE—TWO BLAST FURNACES**, fitted with stove pipes of the best description. There are also a number of Coke Ovens, and if required a Colliery could be arranged for producing an excellent Coking Coal. Also a very good Manager's House. The furnaces are on the Great Western Railway, and about 25 miles from Cardiff.

For particulars and order to view address A. B., care of E. D. TILL, 26, Lombard-street, London, E.C.

**DECLARATION OF THE FIFTEENTH MONTHLY DIVIDEND.****LA PLATA MINING AND SMELTING COMPANY.**

Capital 200,000 Shares of \$10 or £2 each.

The Board of Directors have DECLARED a DIVIDEND of FIFTEEN THOUSAND DOLLARS out of the profits realised in October, being at the rate of 9 per cent. per annum on the capital, PAYABLE on December 1, leaving at credit of reserve fund, \$51,068.87.

THEODORE BERDELL, Vice-President.  
21, Great Winchester-street, E.C., 20th November, 1880.

**THE FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY (LIMITED).**

Notice is hereby given, that the next ANNUAL MEETING of the Shareholders of this company will be HELD at the City Terminus Hotel, Cannon-street, in the City of London, on TUESDAY, the 14th day of December, 1880, at One o'clock P.M., for the following purposes:—

To receive the report of the directors, and the audited statement of accounts of the company for the two half-years ending the 30th June, 1880.

To elect directors.

To elect an auditor; and for other business.

By order of the Board, J. JAMESON TRURAN, Secretary.  
184, Gresham House, Old Broad-street, London, E.C.,  
27th November, 1880.

**ANTIOQUIA (FRONTINO) COMPANY (LIMITED).**

Notice is hereby given, that the next ORDINARY MEETING of the Shareholders of this company will be HELD at the City Terminus Hotel, Cannon-street, in the City of London, on TUESDAY, the 14th day of December, 1880, at Two o'clock P.M., for the following purposes:—

To receive the report of the directors, and the audited statement of accounts of the company to the 30th April, 1880.

To elect two directors.

To elect an auditor; and for other business.

By order of the Board, J. JAMESON TRURAN, Secretary.  
184, Gresham House, Old Broad-street, London, E.C.,  
27th November, 1880.

**THE LOMAX SILVER-LEAD MINE COMPANY (LIMITED), HELSTON, CORNWALL.**

Messrs. THOMPSON and SONS, Secretaries of the above company, have much pleasure in drawing attention to the Special Reports from Capt. Hancock and Capt. Curtis, both of whom well know the district. The reports appear on page 1354 in this day's Journal. It is the opinion of every practical miner that this mine, commonly known as Old Wheal Rose, will prove to be the richest Silver-Lead and Iron Mine ever opened in the county of Cornwall.

The unallotted shares may be secured for £1 each, fully paid up, by applying to Messrs. THOMPSON and SONS, 14, Old Town-street, Plymouth.

It is believed in a very short time these shares will be at a high market value. Full particulars will be given to every intending investor.

Plymouth, November 25th, 1880.

**THE FORTESCUE (STANNAGWYN) NATIVE TIN, COPPER, AND ARSENIC COMPANY (LIMITED), ST. STEPHENS, CORNWALL.**

Messrs. THOMPSON and SONS, secretaries of this progressive mineral property, INVITE SUBSCRIPTION for the FEW REMAINING UNALLOTTED SHARES in the company at the low price of 40s. each.

This mine, since the company was formed to work it early in the year, has exceeded the expectations of the resident and superintending agents, so far as the products of minerals are concerned; and it is calculated that there is sufficient ore ground laid open to view, which can be stepped away and sent to stamps (now set at 5s. per ton), to last for very many months to come, without further prospecting. We shall, however, sink on the lode below the 25 ft. level some 10 or 12 fms., as we expect the ore ground will (as in most similar cases) prove richer, and the lode more compact, and carrying more tin.

We have already commenced stamping tin stone from the back of the lode, and some stones from a counter lode found in a quarry, giving a very fair produce for shallow ore, and to view, which can be stepped away and sent to stamps, which is daily taking place, and we can keep up a constant supply of black tin for the market. A batch of tin will be sold this month.

We have 16 heads of stamps now working day and night, but the tinstuff can be raised equal to the power of at least 100 heads; and as tin is rising in market value, it is most desirable that we should at once set more stamps to work. We fear, however, if we attached a second battery of stamps to our engine we should run a risk of overpowering it, as it has to do duty of pumping, drawing the stuff, and stamping. The managing director has, therefore, had for some time under his serious consideration the expediency of erecting further machinery for increasing the returns of minerals.

An unexpected opportunity has just offered itself, of which we were glad to take advantage for the benefit of the company, and which will enable us to return at least four times as much tin, copper, and arsenic as we can possibly do with our present machinery.

In the land immediately adjoining Fortescue Mine to the east is the St. Stephens Colliery, leased for 21 years, of which 14 years are unexpired. On the property a large quantity of machinery, buildings, &c., have been erected; namely, a 24-in. cylinder rotary engine, 40 fms. of flat-rods, bobs, 12 fms. 10 in. plunger lift, 50 fms. 10 in. pumps, 50 fms. of winding gear, quantity of launders, &c., two sheds, one 150 ft. by 15 ft., and one 120 ft. by 18 ft., engine and boiler houses, all built of stone, offices, material house, smithy and carpenter's shops. This machinery, buildings, &c., cost no less than £5000, and the land on which they stand has been paid for.

The engine is quite capable to pump and work 48 heads of stamps, and the buildings can, at a small expense, be constructed into extensive dressing-floors.

There are several tin lodes never worked running through the new set. The property having been worked solely for clay, and, owing to the failure of a bank, which held a mortgage, and the death of the chief owner, we have been enabled to purchase the lease and machinery all free to present date, for £1000, including valuable clay stopes. In addition to the purchase money, we calculate that a further outlay of about £2500 will be required for 48 heads of stamps and lifts complete, and the reconstruction of dressing-floors, &c. "This" Capt. James writes "would increase the output of stamping by 48 tons per day, and taking the yield at 1/4 cwt. of tin to 1 ton of lode stuff, would give over 18 tons of tin per month. Some of the lode stuff will, however, be worth more than 1 cwt. of tin to 1 ton of lode stuff."

The cartage from Fortescue Mine will not cost more than 4d. per ton of stuff to the new stamps.

Applications for shares to secure them at present price must be made at once to us.

THOMPSON and SONS, Secretaries, 14, OLD TOWN STREET, PLYMOUTH.

**THE SOUTH WYNAAD GOLD MINING COMPANY (LIMITED).**

Capital £100,000, in Shares of £1 each.

Notice is hereby given, that the SUBSCRIPTION LIST will CLOSE on WEDNESDAY next, the 1st December, for LONDON, and THURSDAY, the 2nd December, for the COUNTRY.

**THE CLOGAU MINING COMPANY (LIMITED).**

NOTICE.—The SHARE LIST, offered for subscription in the Mining Journal of the 20th instant, WILL BE CLOSED THIS DAY, SATURDAY, 27th November, 1880.

Letters of Allotment and regret will be posted next week.

By order of the Board,

E. HARBOROW, Secretary.

**MESSRS. THOMSON AND CO., STOCK AND SHARE DEALERS.**

88, BISHOPSGATE STREET, E.C.

BANKERS: ROYAL EXCHANGE.

Business transacted in every description of Stocks and Shares.

**TREVINE CONSOLS.**—We have for some time past strongly advised an immediate investment in this mine. A rich course of copper ore has now been discovered close to surface. We believe this will prove the greatest discovery made in Cornwall for many years past. Shares are rapidly advancing in value. Price about 20s. See report.

**MINE "EL CALLAO," GUAYANA, VENEZUELA.**

COUPONS OF SHARES..... 322

Gold in bars produced in the month of September, 1880, and re-mitted to Messrs. Baring Brothers and Co., London, 4830-99 ozs.

DIVIDEND distributed for each coupon, \$150.

(Signed) A. LICCONI, President.

(Signed) VICTOR T. GRILLET, Treasurer.

**THE NEWPORT ABERCARN COLLIERY COMPANY, NEWPORT, MON.,**

having acquired a new Coal Taking, require a LARGE NUMBER OF ADDITIONAL COLLIERIES to develop same.

Apply to Manager, at Works.

**FOR SALE, a SEMI-PORTABLE PIT SINKING, COAL WINDING, and PUMPING ENGINE**, double 9 1/2 in. cylinder, fitted with link-motion reversing gear, mounted on a multitubular boiler, with Bowling from fire-box;

Also WINDING GEAR, drum 5 ft. diameter, brake, and PUMPING GEAR complete, ready for immediate delivery.

To be seen at—  
BARROWS AND STEWART'S WORKS, BANBURY, OXON.

**THE NEWCASTLE DAILY CHRONICLE**

(ESTABLISHED 1764).

CHRONICLE AND NORTHERN COUNTIES ADVERTISER  
Offices, Westgate-road, Newcastle-upon-Tyne; 50, Howard-street, North Shields, 195, High-street, Sunderland.

**LEAD ORES.**

Mines.	Tons.	Price per ton.	Purchasers.
13—United Van Consols...	40	£ 9 5 0	Nevill, Druece, and Co.
25—Great Dyff...	30	10 6 0	Goodhart and Co.
—West Asheton	20	10 3 6	Sheldon, Bush, and Co.
—ditto	20	10 3 6	Walker, Parker, & Co.
—East Roman Gravel	40	10 5 0	Sheldon, Bush, and Co.
26—Northern	24	9 9 0	J. Walton.

The rich Tin District,  
important to all inter-  
ested in Mining.

## THE RASHLEIGH TIN AND COPPER MINE, LIMITED.

Since issuing the Prospectus of the above Company an extraordinary discovery has been made in the adjoining mine, New Eliza, where a lode of tin already TWELVE FEET WIDE is laid open, and THE SOUTH WALL NOT AS YET REACHED, there are ROCKS of Tinstone being blasted out 3 tons weight, producing on an average the enormous quantity of

4 cwts. 3 qrs. 19 lbs. 0.3 oz.  
TO THE TON OF TINSTONE.  
It is stated by the agent, under date 20th inst., that the pile of ore already raised is splendid,  
**ROCKS OF SOLID TIN**

as large as wheelbarrows glistening against the sun, and that several mining agents who recently visited the property state that the Mine is worth  
**£50,000.**

He further states that  
THIS LODE RUNS DIRECTLY INTO  
THE "RASHLEIGH MINE,"

and he sees no reason why it should not be as rich in the Rashleigh Mine as it is in the New Eliza.

Now, looking at the above facts from a mining point of view with the ALREADY discovered good PAYING LODES in the Rashleigh, and seeing that this ENORMOUSLY rich lode referred to above runs

DIRECTLY INTO AND THROUGH THIS  
PROPERTY,

there cannot be a shadow of a doubt that the Rashleigh Tin and Copper Mine will take rank with the  
BEST PAYING MINES  
in the kingdom.

We have every confidence in recommending this Mine to the notice of investors as a highly promising and sound property, as offering an almost positive certainty of success and a minimum of risk.

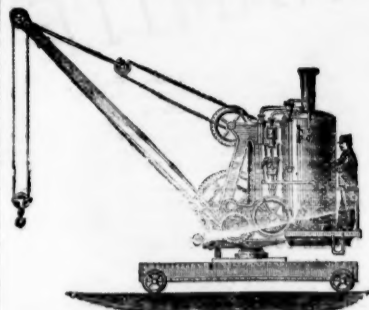
Shares are now £1 15s. each, and we can offer a LIMITED NUMBER at that price.

**GRIFFIN, YOUNG,  
BURBIDGE, & YOUNG,**  
STOCK AND SHARE BROKERS,

353 to 358, and 322, MANSION HOUSE  
CHAMBERS, E.C.

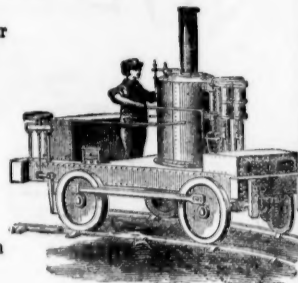
## CHAPLINS' PATENT STEAM ENGINES AND BOILERS

PRIZE MEDAL, INTERNATIONAL EXHIBITION.



**STEAM CRANES,**  
Portable or Fixed, for Railways, Wharves, &c., for  
unloading  
COAL BALLAST, &c.,  
A 10 1/2 cwt. to 30 tons.

**LOCOMOTIVES,**  
6 to 27-horse power. For Steep Inclines and  
Sharp Curves.  
Gauge from 2 feet upwards.  
Geared to draw very heavy weights in proportion  
to their power, and SPECIALLY  
SUITABLE FOR



Contractors' Work, Railway Sidings, Coal Mines, Quarries, Gasworks, &c.

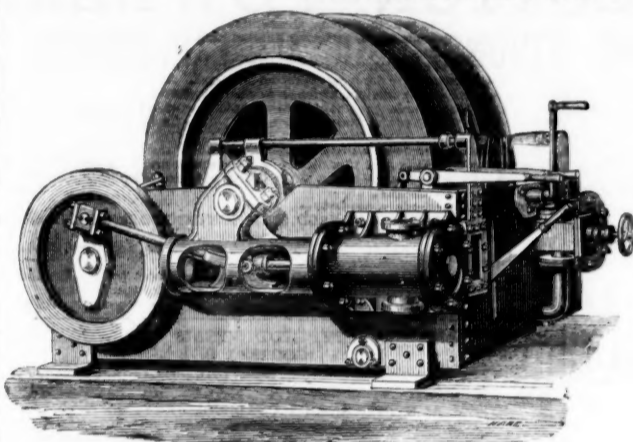
These Cranes were selected by H.M. Commissioners to receive and send away the Heavy Machinery in the International Exhibitions 1862, 1871, and 1872.

**WIMSHURST, HOLICK, & CO., ENGINEERS.**

Works: REGENT'S CANAL DOCK, 802, COMMERCIAL ROAD EAST, LONDON, E. (near Stepney Station)  
CITY OFFICE: 2, WALBROOK, LONDON, E.C.

## STEVENS' PATENT UNDERGROUND WINDING ENGINE

DESIGNED FOR USING COMPRESSED AIR OR STEAM.



**SIMPLE, COMPACT, PORTABLE.**

Silver Medal, Royal Cornwall Polytechnic Society, 1870.

No. 1 size, 7 in. single cylinder, with 2 ft. drums.  
No. 2 size, 9 in. single cylinder, 2 ft. 6 in. drums.  
A, 6 in. double cylinder, with 2 ft. 3 in. drums.  
B, 8 in. " " 3 ft. 0 in. drums.  
C, 10 in. " " 3 ft. 6 in. drums.  
D, 12 in. " " 4 ft. 6 in. drums.  
E, 14 in. " " 5 ft. 0 in. drums.

MANUFACTURED BY

**THE USKSID CO.,**

ENGINEERS, MAKERS OF PUMPING AND WINDING  
MACHINERY, AND FORGINGS OF EVERY  
DESCRIPTION.

**NEWPORT, MON.**

Agents for the six Northern Counties—  
TANGYE BROTHERS, ST. NICHOLAS BUILDINGS,  
NEWCASTLE-ON-TYNE.  
[This Advertisement appears fortnightly.]

**AIR-COMPRESSOR FOR SALE.**—  
Vertical Direct-Acting, combined with Steam Engine. Jack-  
etted Air Cylinder, 10 1/2 in. diameter: steam cylinder, 11 in. diameter,  
18 in. stroke. Other sizes in progress.

ALEX. WILSON AND CO.,

ENGINEERS,

VAUXHALL IRONWORKS, WANDSWORTH ROAD.

**ENGINES, BOILERS, &c., FOR SALE:**—  
FIRST-CLASS 50-inch cylinder PUMPING ENGINE.  
ditto 24-inch " ROTARY ENGINE  
CALCINER, STONEBREAKER, &c.  
Apply to Capt. NICHOLLS, Camborne.

**THE SANDYCROFT FOUNDRY AND ENGINE  
WORKS COMPANY (LIMITED).**

NEAR CHESTER

Late the MOLD FOUNDRY COMPANY. Established 1838.)

MAKERS OF

MINING MACHINERY,  
CORNISH PUMPING, WINDING, AND EVERY OTHER DESCRIPTION  
OF ENGINE,

PITWORK, BOILERS, FORGINGS,  
WATER-WHEELS, ORE CRUSHING, STAMPING, AND DRESS  
MACHINERY,

GOLD AND SILVER AMALGAMATING MACHINERY,  
MINING TOOLS,

ROCK DRILLS, AIR COMPRESSING ENGINES, and all the  
necessary accessories for MACHINE BORING.

SPECIAL ATTENTION given to MACHINERY FOREIGN MINES.

SECOND-HAND MINING MACHINERY FOR SALE.

LONDON AGENT:—MR. JOHN F. PEARSE,

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**THE "JAMIN" PATENT ELECTRIC LIGHT.**

COMPAGNIE GENERALE D'ECLAIRAGE ELECTRIQUE.

Capital, 8,000,000 Francs.

Proprietors of the Gramme Patent Machine for Alternate Currents.

J. A. BERLY, C.E., A.S.T.E., &c.,

Engineer, and Sole Agent for Great Britain and the Colonies

16, NEW BRIDGE STREET, LONDON.

**MESSRS. W. NANCE AND CO**  
MINING ENGINEERS AND INSPECTORS,

22, STANLEY STREET WEST, NORTH SHIELDS,

Having Inspected and Managed a large number of Mines at Home and Abroad,  
are PREPARED TO FURNISH VALUABLE INFORMATION on reasonable  
terms. French and German spoken.

ALL KINDS OF MACHINERY SUPPLIED—DRESSING A SPECIALTY.

THE ONLY COMPLETE AUTOMATIC DRESSING  
FLOORS EXTANT.

**PATENT TRUCK WINCHES, HAULING ENGINES, &c.,** for  
over and underground purposes. Worked with air or steam  
strong, simple, and effective

A. HIGGINSON AND CO.,

56, TOWER BUILDINGS, E., LIVERPOOL, W.

**THE MINING RECORD.** Only \$3.00 a year  
61, BROADWAY, NEW YORK.

Is the ONLY PAPER in the United States that gives FULL LATEST ACCOUNTS  
from all the GREAT GOLD, SILVER, IRON, and COAL MINES of AMERICA.

ORDERS EXECUTED FOR MINING STOCKS. Information free

ALEX. ROBT. CHISHOLM, Proprietor.

London Office:—H. J. CHAWNER, Manager, 3, Catherine-street, Strand, W. G.

**JACKSON AND BUTTERFIELD,**  
ANALYSTS AND ASSAYERS,

Assays or Complete Analyses made of Copper, Silver, Lead, Zinc, Tin,  
other Ores. ASSAYING TAUGHT.

106, QUEEN VICTORIA STREET, LONDON, E.C.

**J. S. MERRY,**

ASSAYER AND ANALYTICAL CHEMIST  
SWANSEA

SUPPLIES ASSAY OFFICE REQUIREMENTS AND RE-AGENTS.

**W. TREGAY, Mining Engineer, REDRUTH.**

Having had many years' practical experience in Metallic Mining,  
prepared to INSPECT, REPORT, and ADVISE on every description  
of MINERAL PROPERTY

**MR. WILLIAM BREDEMAYER, MINING, CONSULTING  
and CIVIL ENGINEER, U.S. MINERAL SURVEYOR for UTAH and**

IDAHO. NOTARY PUBLIC.  
Geological examinations; reports on mining properties; surveys mines,  
roads, and canals, and superintends the workings of the same; prepares  
plans and maps for opening and working mines. Expert on mining questions  
before the Courts. Address, P.O. Box 1157, Salt Lake City, Utah.

Published this day, post free, 1 1/2 stamps.

**"SOW AND REAP."**—A reliable Journal for Investors.  
Contains this month "Mining Selections" for a rise, and articles on  
"Metal Trade," a "Bull Ring," "Caution to Investors in Silver Mines,"  
"Operative Humbug," "Turkish Financial Difficulties," "Financial History  
the Month," &c., &c.  
Published by Messrs. THOMPSON and SONS, 14, Old Town-street, Plymouth.

**THE IRON AND COAL TRADES' REVIEW**

The IRON AND COAL TRADES' REVIEW is extensively circulated amongst  
Iron Producers, Manufacturers, and Consumers, Coalowners, &c., in all the  
and coal districts. It is, therefore, one of the leading organs for advertising  
description of Iron Manufactures, Machinery, New Inventions, and all matters  
relating to the Iron Coal, Hardware, Engineering, and Metal Trades in general.

Offices of the Review: 7, Westminster Chambers, S.W.

Remittances payable to W. T. Pringle.

Just published, cloth limp, price 1s. 6d.

**THE COLLIERY READY-RECKONER AND WAGE**

CALCULATOR.

By JAMES E. IRELAND

"Will be the means of preventing many disputes between pay clerks and  
colliers."—Mining Journal

To be had on application at the MINING JOURNAL Office, 26, Fleet-street, E.C.

DEBILITY AND NERVOUSNESS.

Free Edition, 152 pages, post free, in envelope, two stamps. The

**WARNING VOICE.**—A Special Medical Book for Young Men  
on the Cause, Consequence, and Treatment of certain forms of Debility  
and Nervousness, viz.—Mental and Physical Depression, Palpitation of the Heart,  
Noises in the Head and Ears, Impaired Sight and Memory, Indigestion, Pain in  
the Back, Headache, Flies, Constipation, Hysteria, Dizziness, Local Weakness,  
Muscular Relaxation, Nervous Irritability, Blushing, &c., resulting from Ex-  
haustion of Nerve power, effect of Overwork, City Life, Worry, Brain Follies, Intem-  
perance, and other abuses of the system.

Address, Dr. H. SMITH, 8, Burton Crescent, London W.C.

**PATENT FUEL EXPORTS.**—From the official statement it appears  
that last month there were exported from free ports rather more than  
34,000 tons of patent fuel. From Swansea, 16,886 tons were exported,  
the largest quantities being to Bordeaux, 3288 tons, and to Marseilles,  
2510 tons. From Cardiff and Penarth the quantities sent amount  
to 15,021 tons, Alexandria, Barcelona, Cronstadt, Madras, Rangoon,  
Salonica, Valencia, and Vera Cruz, each taking above 1000 tons.  
From Sunderland 2180 tons were shipped to Cronstadt. No other  
port is named in the list as having exported patent fuel during  
last month.

**WITTY AND WYATT'S DIARY.**—To relieve their customers of the  
annoyance of having their circulars and price lists loose upon their  
desks Messrs. Witty and Wyatt, of Fenchurch-street, have hit upon  
the ingenious expedient of attaching them to a diary for 1881,  
which they also annex postal and other information. The diary  
well and clearly printed, and contains a week to a page, so that  
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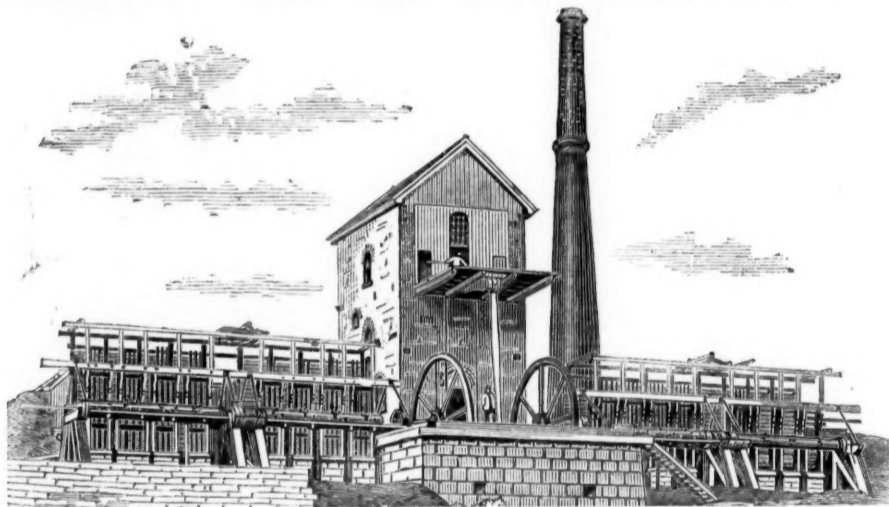
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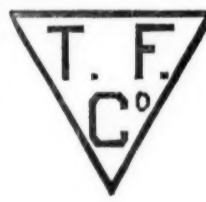


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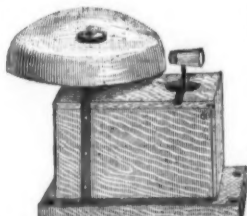
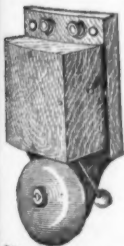
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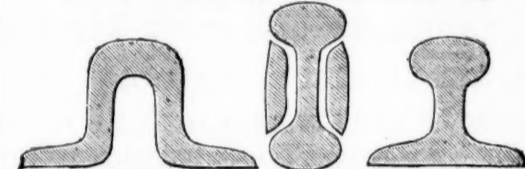
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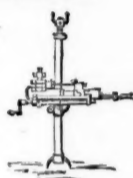
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Supplement, April 1, 1876, containing a report on property of the Maxwell Land  
Grant and Railway Company; as to technical standing, to the prominent men of  
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## THE MINING SHARE LIST.

## BRITISH DIVIDEND MINES.

Shares.	Par.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
3939 Blue Hills, t, c, St. Agnes	4 6 6	4	3 1/2	0 2 0	0 2 0	Oct. 1878
10000 Caron, t, Cardigan	2 0 0	2	1 1/2	0 4 0	0 4 0	Oct. 1878
10000 Cara Brea, t, c, Illogan	56 7 6	100	97 1/2	308 3 0	1 0 0	Feb. 1874
10000 Devon Gr. Consols, t, c, Tavistock	1 0 0	15	12 1/2	113 7 0	0 6 0	Dec. 1880
4296 Dolcoath, t, c, Camborne	10 10 0	57	55 5/8	113 11 3	1 0 0	Sept. 1880
30000 East Craven Moor, t, c, Pateley Bdg.	1 0 0	1	3 1/2	0 6 0	0 6 0	Aug. 1880
6400 East Pool, t, c, Illogan	0 9 3	34	36 3/8	20 17 9	1 2 6	Sept. 1880
12500 Frongoch, t, c, Cardigan (10000 sh. iss.)	2 0 0	4 1/2	4 1/2	0 2 0	0 2 0	June 1880
40000 Glasg. Car., t, c, 30000 sh. £1 pd., 10000	135. pd.	1 1/2	1 1/2	0 13 0	0 6 0	Aug. 1878
7500 Gorsead and Merilyn Con., t, Flint	2 10 0	3	2 1/2	0 5 0	0 5 0	Oct. 1877
15000 Great Lacey, t, c, Isle of Man	4 0 0	19 1/2	19 1/2	26 8 0	0 6 0	Oct. 1880
6400 Green Hurth, t, c, Durham	0 6 0	7	8 1/2	2 14 0	0 4 0	Oct. 1880
20000 Grosvenor, t, c, Cardigan	2 0 0	3 1/2	3 1/2	0 16 4	0 1 6	July 1880
10240 Gunnslake (Clitters), t, c	2 2 0	4	3 1/2	0 14 9	0 3 0	Nov. 1880
2800 Isle of Man, t, c, Isle of Man	25 0 0	—	—	83 5 0	1 0 0	Sept. 1880
20000 Leadhills, t, c, Lanarkshire	6 0 0	2 1/2	2 1/2	0 15 0	0 3 0	Mar. 1878
400 Lisburne, t, c, Cardiganshire	18 15 0	—	—	604 10 0	2 0 0	Oct. 1880
10000 Mellanear, t, c, Hayle	2 0 0	5	4 1/2	1 1 0	0 2 6	Nov. 1880
9000 Minera Mining Co., t, c, Wrexham	5 0 0	11	10 1/2	68 19 2	0 2 0	Oct. 1880
20000 Mining Co. of Ireland, t, c, B.	7 0 0	3 1/2	3 1/2	24 3 0	0 2 6	Jan. 1880
8000 Mona, t, c, Anglesea	5 0 0	15	15 1/2	0 10 0	0 10 0	July 1880
5328 North Bury, t, c, Blackwater	0 5 8	3 1/2	3 1/2	0 3 4	0 10 0	Oct. 1878
11829 North Hendre, t, c, Wales	2 10 0	5	4 1/2	3 10 0	0 7 6	Mar. 1880
8063 Ditto	1 0 0	—	—	0 7 0	0 3 0	Mar. 1880
5000 Penhalg, t, c, St. Agnes	3 17 6	2	1 1/2	3 15 6	0 2 0	Sept. 1880
6000 Pennant, t, c, North Wales	5 0 0	3 1/2	3 1/2	0 10 0	0 5 0	Mar. 1878
12000 Phoenix United, t, c, Link	5 10 3	3 1/2	3 1/2	3 2 6	0 2 6	Mar. 1880
18000 Pr. Patrick, t, c, (als. 12000 p. 10 p.c.)	1 0 0	—	—	0 18 6	0 2 0	July 1880
10000 Red Rock, t, c, Cardigan	2 0 0	2 1/2	2 1/2	0 1 0	0 2 0	Jan. 1878
12000 Roman Gravel, t, c, Salop	7 10 0	9 1/2	9 1/2	0 1 0	0 5 0	Apr. 1880
4000 Rhylalun, t, c, Wales	10 0 0	—	—	0 5 0	0 5 0	Feb. 1880
512 South Cardigan, t, c, Cleer	1 5 0	65	55 60	749 0 0	1 0 0	July 1880
6123 South Condurrow, t, c, Camborne	6 5 6	11 1/2	11 1/2	7 12 0	0 10 0	Aug. 1880
9000 South Darren, t, c, Cardigan	1 10 0	2 1/2	2 1/2	0 4 0	0 2 0	Apr. 1880
4500 South Wheel Franches, t, c, Illogan	7 12 4	12	11 1/2	40 15 6	0 10 0	July 1880
110000 Tankerville Gr. Consols, t, c, Salop	1 0 0	1 1/2	1 1/2	0 16 3	0 10 0	Jan. 1877
6000 Tincroft, t, c, Pool, Illogan	11 10 0	18	18 1/2	50 8 0	0 5 0	May 1877
15000 Van, t, c, Llanidloes	5 0 0	18	15 1/2	24 18 0	0 7 6	July 1880
3000 West Chiverton, t, c, Penryn	20 5 0	1 1/2	1 1/2	55 10 0	0 10 0	Feb. 1878
512 West Tolgus, t, c, Redruth	95 10 0	55	55 55	33 0 0	1 0 0	Jan. 1879
1200 West Wheel Seton, t, c, Camborne	25 10 0	18	17 1/2	223 0 0	0 7 6	Apr. 1878
6000 West Basset, t, c, Illogan	7 0 0	16	15 1/2	26 17 0	0 5 0	Oct. 1880
12000 Wheel Crebor, t, c, Tavistock	2 4 0	4 1/2	4 1/2	0 7 9	0 1 6	Nov. 1880
1024 Wheel Eliza Consols, t, c, Austell	18 0 0	—	—	42 10 0	0 8 0	Aug. 1880
4295 Wheel Kitty, t, c, St. Agnes	5 4 6	5	4 1/2	12 17 0	0 2 6	Sept. 1880
5000 Wheel Peavor, t, c, Redruth	7 11 0	29	28 1/2	6 8 6	1 2 6	Sept. 1880

## FOREIGN DIVIDEND MINES.

Shares.	Par.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35500 Alamillos, t, Spain	2 0 0	1 1/2	1 1/2	2 2 0	0 1 3	Sept. 1880
130000 Almaden and Tinto Consol., t, Spain	1 0 0	—	—	0 6 3	0 1 0	May 1876
20000 Australian, t, c, South Australia	7 0 0	4 1/2	4 1/2	39 7 6	1 0 0	Aug. 1880
20000 Cape Copper Mining, t, c, South Africa	7 0 0	4 1/2	4 1/2	39 7 6	1 0 0	Aug. 1880
35000 Cesena Sulph. Co., Romagna, Italy	10 0 0	—	—	1 1 0	0 1 0	Aug. 1879
10000 Copiapo, t, c, Chile (420 shares)	17 0 0	12	11 1/2	7 16 5	0 5 0	July 1880
23500 Eberhardt and Aurora, t, Nevada	10 0 0	2 1/2	2 1/2	1 8 0	0 3 0	Dec. 1877
70000 English & Australian, t, c, S. Aust.	2 10 0	1 1/2	1 1/2	2 18 9	0 1 0	Mar. 1880
25000 Fortuna, t, Spain	2 0 0	6	5 6	7 15 5	0 4 0	Sept. 1880
55000 Frontino, t, c, Pool, Illogan	2 0 0	4 1/2	4 1/2	0 8 0	0 1 0	Sept. 1880
15000 Llanars, t, c, Spain	5 0 0	6 1/2	6 1/2	18 10 0	0 8 0	Sept. 1880
60000 New Quebrada, t, c, Venezuela	5 0 0	6 1/2	6 1/2	0 1 0	0 1 0	Sept. 1880
25000 Pitanguy, t, c, Brazil (in 6000 £1 pd.)	0 10 0	3 1/2	3 1/2	0 1 0	0 1 0	Sept. 1880
10000 Pontgibaud, t, c, France	20 0 0	20	18 20	27 17 6	0 10 0	Dec. 1879
100000 Port Phillip, t, c, Clunes (42 shares)	1 0 0	—	—	1 13 4	0 1 4	Mar. 1880
45000 Richmond Consol., t, Nevada	5 0 0	15 1/2	14 1/2	10 1 6	0 10 0	Nov. 1880
1558880 Rio Tinto, t, c, S. Comp. Bds., Huelva	100 0 0	97	93 95	5 per cent.	—	July 1880
225000 Ditto, Bds. English S. p.c. Scrip	10 0 0	93 1/2	93 95	5 per cent.	—	July 1880
40000 Santa Barbara, t, c, Brazil	0 10 0	18 1/2	18 1/2	0 10 0	0 8 0	Nov. 1880
120000 Scottish-Australian Mining Co., t, c	1 0 0	2 1/2	2 1/2	15 p. cent.	—	May 1880
80000 Ditto, New	0 10 0	—	—	15 p. cent.	—	May 1880
50000 Senterin, t, c, t, c, Arles, France	0 10 0	2 1/2	2 1/2	0 2 0	0 2 0	Jan. 1880
22500 Sierra Buttes, t, c, California	2 0 0	1 1/2	1 1/2	2 1 6	0 1 0	Oct. 1880
40625 Ditto, Pumas Eureka	2 0 0	2 1/2	2 1/2	2 10 0	0 3 0	Oct. 1880
253000 St. John del Rey, t, c, (45 Stock and multiples dealt in)	180 190	—	—	12 1/2 p. cent. for half-year, June 1880	—	—
20000 Tolima, t, c, Colombia	1 0 0	—	—	1 7 3	0 4 3	Aug. 1880
25000 Victoria (London), t, c, Australia	1 0 0	—	—	0 13 1/2	0 7 1/2	June 1879
15000 Western Andes, t, c, Colombia	5 0 0	—	—	2 18 0	0 2 6	Aug. 1880
2100 W. Prussian (5500 pref. sh. £10 pd.)	10 0 0	10 1/2	10 10 1/2	3 6 0	0 8 0	Oct. 1880

§ Have made calls since last dividend was paid.

## NON-DIVIDEND BRITISH MINES.

Shares.	Par.	Last wk.	Clos. pr.
25600 Aberllyn, t, c, Carnarvon	1 0 0	—	—
12000 Ashcroft, t, c, Carnarvonshire	5 0 0	—	—
11583 Bedford Unit, t, c, Tavis (42 sh.)	0 6 0	—	—
25000 Belowda, t, c, Roche	1 0 0	1 1/2	1 1/2
600 Bendigaid, t, c, Wales	10 0 0	—	—
30000 Bettws-y-Coed, t, c, (20000 sh. issued)	1 0 0	—	—
8000 Bladen Ouelan, t, c, Cardigan	3 0 0	—	—
30000 Bodidris, t, c, Denbighshire	1 0 0	1 1/2	1 1/2
800 Botallack, t, c, St. Just	31 10 0	—	—
10000 British, t, c, Wrexham	2 0 0	2 1/2	2 1/2
20000 Bwlch United, t, c, Cardigan	1 0 0	2 1/2	2 1/2
50000 Cambrian, t, c, c, Cardiganshire	2 0 0	2 1/2	2 1/2
6000 Carn Camborne, t, c, Camborne	0 2 6	3 1/2	3 1/2
20000 Carnarvon, t, c, Carnarvonshire	1 0 0	1 1/2	1 1/2
20000 Central Foxdale, t, c, (2 sh.)	1 17 6	—	—
5120 Clementina, t, c, Llanrwst	1 0 0	3 1/2	3 1/2
25000 D'Eresby Consols, t, c, Carnarvon	1 0 0	1 1/2	1 1/2
8000 Combmartin, t, c, North Devon	1 0 0	1 1/2	1 1/2
2450 Cook's Kitchen, t, c, Illogan	29 4 9	10 1/2	10 1/2
15500 Court Grange United, t, c, —	1 0 0	3 1/2	3 1/2
6400 Crook Burn, t, c, Cumberland	0 5 0	3 1/2	3 1/2
14000 Crosswood Mining Lands, t, c	1 0 0	1 1/2	1 1/2
15000 Cwm Dwyfor, t, c, s, c, Carnarvon	1 0 0	—	—
20000 Deep Level, t, c, Flintshire	1 0 0	1 1/2	1 1/2
1280 D'Eresby Consols, t, c, Carnarvon	10 0 0	—	—
1536 D'Eresby Mount, t, c, Llanrwst	20 0 0	50	40 50
20000 Denbighshire Consolidated, t, c	3 0 0	3	2 3
10000 Derwent, t, c, Durham	4 0 0	2 1/2	2 1/2
100000 Devon, t, c, t, c, Tavistock (125000 iss.)	0 1 0	1 1/2	1 1/2
12000 Devon Great United, t, c, (2 sh.)	1 0 0	2 1/2	2 1/2
20000 Devonshire, t, c, t, c, Lydford	1 0 0	1 1/2	1 1/2
10000 Dubby Syke, t, c, Durham	0 17 6	3 1/2	3 1/2
8000 East Botallack, t, c, St. Just	0 2 0	1 1/2	1 1/2
6144 East Caradon, t, c, St. Cleer	3 6 6	2 1/2	2 1/2
4000 East Chiverton, t, c, Penryn	9 14 9	1 1/2	1 1/2
12000 East Crebor, t, c, Tavistock	0 7 6	1	1
15000 East Devon Cons., t, c, Buckfastleigh	2 0 0	3 1/2	3 1/2
21000 East Roman Gravel, t, c, Salop	0 10 0	1	1
18000 East Van, t, c, Llanidloes	5 0 0	2 1/2	2 1/2
4096 East Wheel Buller, t, c, Gwynnapp	0 10 0	1 1/2	1 1/2
1114 East Wheel Lovell, t, c, Helston	13 8 6	1 1/2	1 1/2
10000 Edgumbe, t, c, Cornwall	1 0 0	—	—
30000 Flintshire Great Consols, t, c	1 0 0	—	—
10000 Fortescue, t, c, St. Stephens	1 0 0	2 1/2	2 1/2
12000 Gawton, t, c, Tavistock (2 sh. shares)	1 12 6	1 1/2	1 1/2
14000 Glenroy, t, c, Isle of Man	4 0 0	3 1/2	3 1/2
10000 Gover Consols, t, c, St. Austell	0 10 0	3 1/2	3 1/2
20000 Great Dylliffe (10000 sh. issued)	1 0 0	1	1
12000 Great Holway, t, c, Flintshire	1 0 0	5 1/2	4 5
20000 Griffin, t, c, Carnarvon	1 0 0	—	—
10000 Gwynnapp, t, c, t, c, Flintshire	0 4 0	3 1/2	3 1/2
10000 Harehope Gill, t, c, Durham (42 sh.)	0 5 0	—	—
1200 Hartington Moor, t, c, Derby	1 1 0	1 1/2	1 1/2
6400 Harwood, t, c, Durham	0 15 0	1 1/2	1 1/2
12000 Herodfoot, t, c, near Liskeard	0 8 9	1	1
18000 Hington Down, t, c, Calstock	0 7 0	1 1/2	1 1/2
15000 Indian Queens, t, c, St. Columb	0 8 0	2 1/2	2 1/2
8000 Killfret, t, c, Chacewater	3 15 0	3 1/2	3 1/2
15000 Lady Ann, t, c, Llanarmon	1 0 0	1 1/2	1 1/2
30000 Lady Ashburton, t, c, Callington	1 0 0	1 1/2	1 1/2
15000 Lady Bertha, t, c, Tavistock	0 12 6	1 1/2	1 1/2
12000 Ladywell, t, c, Salop (12000 pref. also)	2 10 0	—	—
5000 Lead Era, t, c, Mold	2 10 0	—	—
25000 Levant, t, c, St. Just	11 0 0	15	14 15
10000 Lomax, t, c, St. Just	0 16 0	1 1/2	1 1/2
10000 Lovell, t, c, Wendron	0 16 0	1 1/2	1 1/2
15000 Llandegla, t, c, Carnarvon	1 0 0	1 1/2	1 1/2
30000 Llanrwst, t, c, Carnarvon	2 0 0	—	—
7500 Ditto, 10 per cent. pref.	2 0 0	—	—
9000 Marke Valley, t, c, Linkinhorne	5 13 6	2	1 1/2
13000 Mawston, t, c, South Wales	1 0 0	1 1/2	1 1/2
6000 Medlyn Moor, t, c, Wendron	3 15 0	—	—
20000 Mid-Devon, t, c, (47000 sh. 4d. pd.)	10 0 0	8	3 1/2
5120 Mineral Corporation of St. Britain	10 0 0	—	—
20000 Mostyn Consols, t, c, Flint	1 0 0	1 1/2	1 1/2
10000 Mynydd Gerdul, t, c, Cardigan	3 12 6	4	3 1/2
25000 Moray Firth (18000 issued)	2 0 0	4	3 1/2
12000 Morfa Du, t, c, s, c, Anglesea	0 10 0	1 1/2	1 1/2
6144 Mount Carbis, t, c, Redruth	0 10 0	3 1/2	3 1/2
4678 New Broadford, t, c, Cardigan (25 sh.)	3 16 0	—	—
12000 New Cathedral, t, c, Gwynnapp	1 0 0	—	—
2400 New Cook's Kitchen, t, c, Illogan	7 14 0	7 1/2	7 1/2
8000 New Dolcoath, t, c, Camborne	3 0 0	—	—
8000 New Killy, t, c, St. Agnes	0 9 0	1 1/2	1 1/2
10000 New Llanfair, t, c, Carmarthen	1 0 0	1 1/2	1 1/2

## NON-DIVIDEND MINES—continued.

Shares.	Par.	Last wk.	Clos. pr.
12000 New Penrose, t, c, Helston (11 sh.)	0 5 0	—	—
3500 New Tincroft, t, c, Lelant	0 5 0	—	—
6000 New West Caradon, t, c, Liskeard	0 5 0	—	—
3000 New Wheel Peavor, t, c, Redruth	0 10 0	—	—
35000 New Wye Valley, t, c, Montgomery	1 0 0	2 1/2	2 1/2
10000 N. D'Eresby Mount, t, c, b, c, Carnarv.	1 0 0	—	—
12000 North Herodfoot, t, c, Liskeard	0 5 0	—	—
2000 North Levant, t, c, St. Just	0 5 0	—	—
50000 North Molton, t, c, m, t, Devon	1 0 0	—	—
6000 North Penstruthal, t, c, Gwynnapp	1 0 0	—	